Schlumberger

Company: **ENCANA OIL & GAS (USA) INC**

Well: **SG 8512C-36 (D36 496)**
Field: **STORY GULCH**
County: **GARFIELD** State: **COLORADO**

SLIM CEMENT MAPPING LOG
CBL-VDL
GR-CCL

County: GARFIELD
Field: STORY GULCH
Location: SHL: 425 FNL & 1039 FWL
Well: SG 8512C-36 (D36 496)
Company: ENCANA OIL & GAS (USA) INC

LOCATION

SHL: 425 FNL & 1039 FWL
BHL: 1932 FSL & 675 FWL

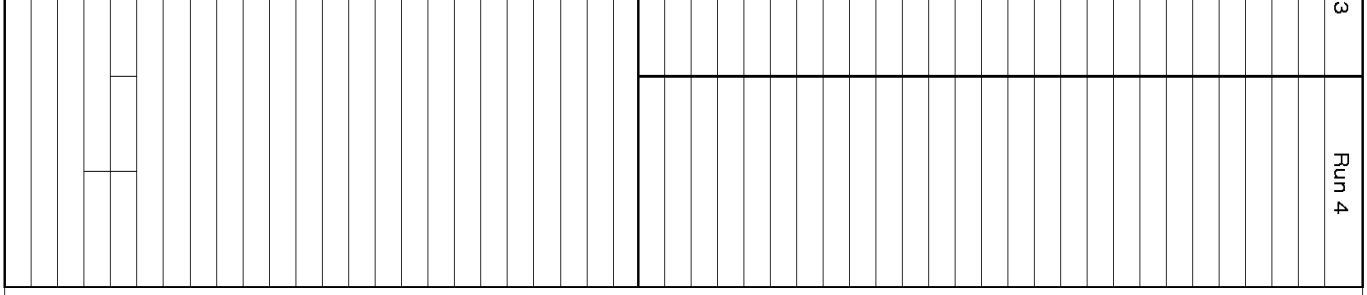
Elev.: K.B. 8320.00 ft
G.L. 8290.00 ft
D.F. 8319.00 ft

Permanent Datum: GROUND LEVEL Elev.: 8290.00 ft
Log Measured From: KELLY BUSHING 30.00 ft above Perm. Datum
Drilling Measured From: KELLY BUSHING

API Serial No.	Section	Township	Range
05-045-20935-00	36	4S	96W

	Run 1	Run 2	Run
PVT DATA			
Oil Density			
Water Salinity			
Gas Gravity			
Bo			
Bw			
1/Bg			
Bubble Point Pressure			
Bubble Point Temperature			
Solution GOR			
Maximum Deviation			
CEMENTING DATA			
Primary/Squeeze	Primary		
Casing String No			
Lead Cement Type			
Volume			
Density			
Water Loss			
Additives			
Tail Cement Type			
Volume			
Density			
Water Loss			
Additives			
Expected Cement Top			
Logging Date			
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Fluid Type			
Salinity			
Density			
Fluid Level			
BIT/CASING/TUBING STRING			
Bit Size			
From			
To			
Casing/Tubing Size			
Weight			
Grade			
From			
To			
Maximum Recorded Temperatures			
Logger On Bottom Time			
Unit Number Location			
Recorded By			
Witnessed By			

Logging Date	12-Jun-2013						
Run Number	1						
Depth Driller	12385 ft						
Schlumberger Depth	12307 ft						
Bottom Log Interval	12299 ft						
Top Log Interval	70 ft						
Casing Fluid Type	FRESH WATER						
Salinity							
Density	8.4 lbm/gal						
Fluid Level	70 ft						
BIT/CASING/TUBING STRING							
Bit Size	7.875 in						
From	9540 ft						
To	12385 ft						
Casing/Tubing Size	4.500 in						
Weight	11.6 lbm/ft						
Grade	P-110						
From	30 ft						
To	12363 ft						
Maximum Recorded Temperatures	284 degF						
Logger On Bottom Time	12-Jun-2013	15:15					
Unit Number Location	391	GRAND JUNCTION					
Recorded By	KIRSTIE BUNTING						
Witnessed By	JOHN MILLER						



DEPTH SUMMARY LISTING

Date Created: 3-JUN-2013 9:46:48

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-B/A	Type:	1-25ZT
Serial Number:	6214	Serial Number:	3421	Serial Number:	112136
Calibration Date:	4-24-2012	Calibration Date:	6-3-2013	Length:	19500 FT
Calibrator Serial Number:		Calibrator Serial Number:	174878		
Calibration Cable Type:	1-25P	Number of Calibration Points:	10	Conveyance Method:	Wireline
Wheel Correction 1:	-3	Calibration RMS:	2	Rig Type:	LAND
Wheel Correction 2:	-4	Calibration Peak Error:	6		

Depth Control Parameters

Log Sequence: First Log In the Well

Rig Up Length At Surface:
Rig Up Length At Bottom:
Rig Up Length Correction:
Stretch Correction:
Tool Zero Check At Surface:

Depth Control Remarks

1. ALL SCHLUMBERGER DEPTH CONTROL PROCEDURES USED
2. IDW USED AS PRIMARY DEPTH CONTROL
3. SWPT DRUM COUNTER USED AS SECONDARY DEPTH CONTROL
4.
5.
6.

OTHER SERVICES1	OTHER SERVICES2
OS1: NONE	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
FIRST RUN IN HOLE CORRELATED TO DOWN LOG	
TOOL RAN AS PER TOOL SKETCH	
MAXIMUM RECORDED TEMPERATURE= 284 DEGF	
MAXIMUM RECORDED PRESSURE= 4954 PSIA	
SHORT JOINTS= 7880' / 10958'	

ENTRANCE TIME= 14:30

LOGGER ON BOTTOM= 15:15

EXIT TIME= 18:15

MAIN PASS LOGGED UNDER ZERO SURFACE PRESSURE

EXPECTED CBL AMPLITUDE IN FREE PIPE = 80MV

THANK YOU FOR CHOOSING E&P WIRELINE, A SCHLUMBERGER COMPANY

YOUR CREW: K. BUNTING W AZIZ K JOHNS

RUN 1		RUN 2	
SERVICE ORDER #:	CGF9-00076	SERVICE ORDER #:	
PROGRAM VERSION:	19C0-187	PROGRAM VERSION:	
FLUID LEVEL:	70 ft	FLUID LEVEL:	

LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

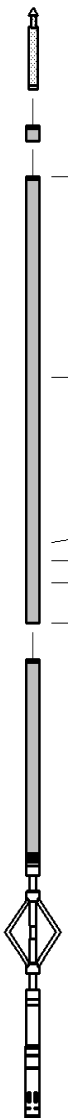
EQUIPMENT DESCRIPTION

RUN 1 RUN 2

SURFACE EQUIPMENT

WITM-A
PSC_16MHZ

DOWNHOLE EQUIPMENT

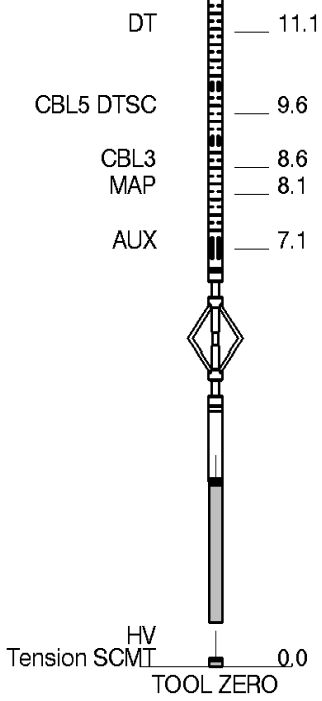


MH-22 30.3
MH-22

AH-38 28.7

PSPT 28.4
PSC-A 928
PSPT-B 928
PSTC-A
PBMS-B
CQG_F_Mano
RTD_Thermometer
GR
CCL
PBMS

SCMT-CB 20.2
SCMC-CA 8120
SECH-CA
CMIR-AG
SCMS-CB 8303
SCMX-CA



AH-YYY

0.2

MAXIMUM STRING DIAMETER 1.69 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN FEET

Schlumberger

MAIN PASS CBL VDL

MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC **Well: SG 8512C-36 (D36 496)**

Input DLIS Files

DEFAULT	SCMT_PSP_018LUP	FN:17	PRODUCER	12-Jun-2013 15:10	12316.0 FT	20.5 FT

Output DLIS Files

DEFAULT	SCMT_PSP_020PUP	FN:19	PRODUCER	12-Jun-2013 18:23	12323.0 FT	6.0 FT

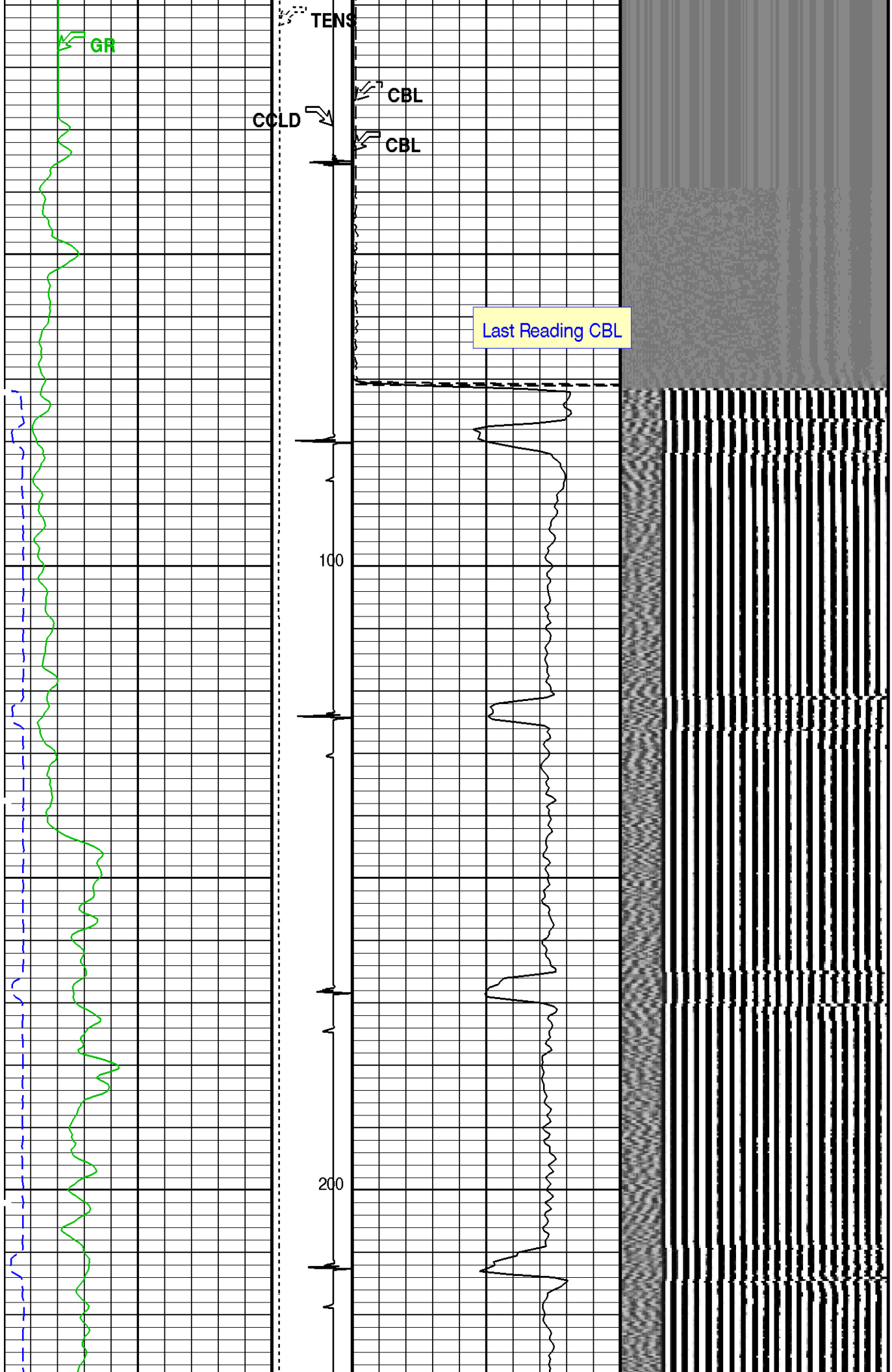
OP System Version: 19C0-187

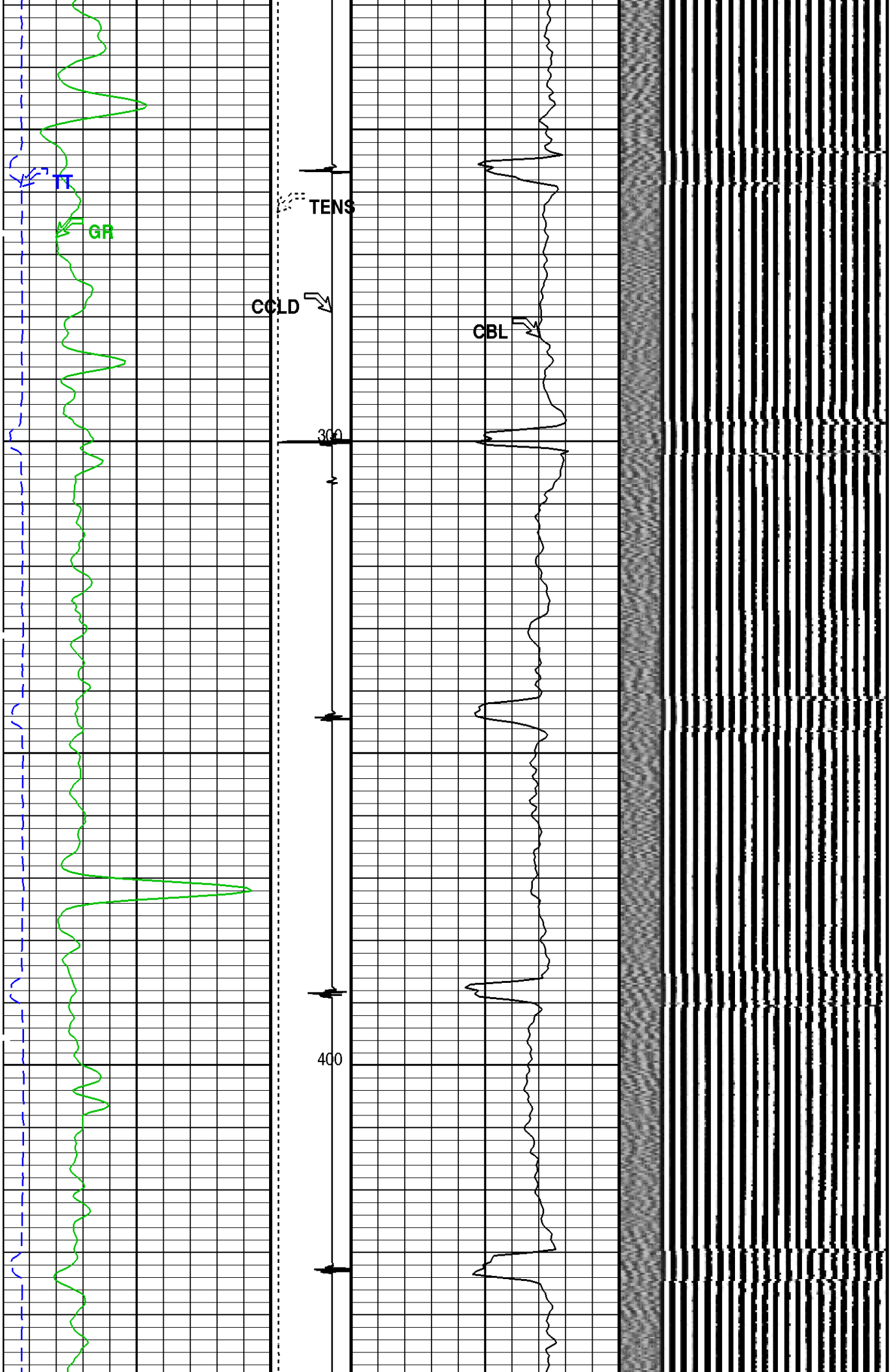
SCMT-CB	SRPC-5214-H2-2012-OP19	PSPT	SRPC-5214-H2-2012-OP19

PIP SUMMARY

Time Mark Every 60 S

Transit Time (TT) 260 (US) 160	Discriminated CCL (CCLD) 3 (V) -1	CBL Amplitude (CBL) 0 (MV) 10	
Gamma Ray (GR) 0 (GAPI) 150	Tension (TENS) (LBF) 0 2000	CBL Amplitude (CBL) 0 (MV) 100	Min Amplitude Max VDL VariableDensity (VDL) 200 (US) 1200


GR
TENS
CBL
CCLD
CBL
Last Reading CBL
100
200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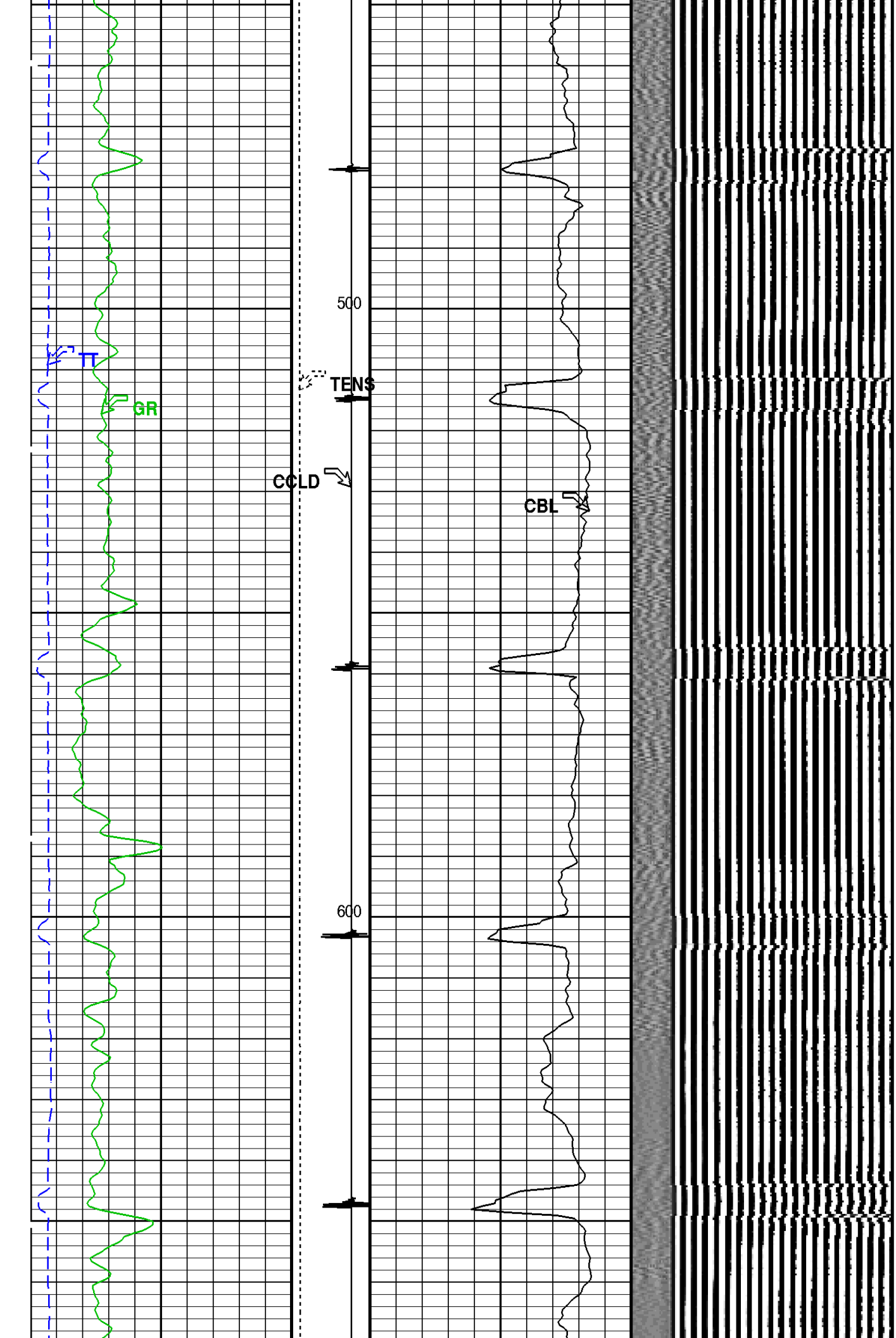
GR
TENS
CCLD
CBL
300
400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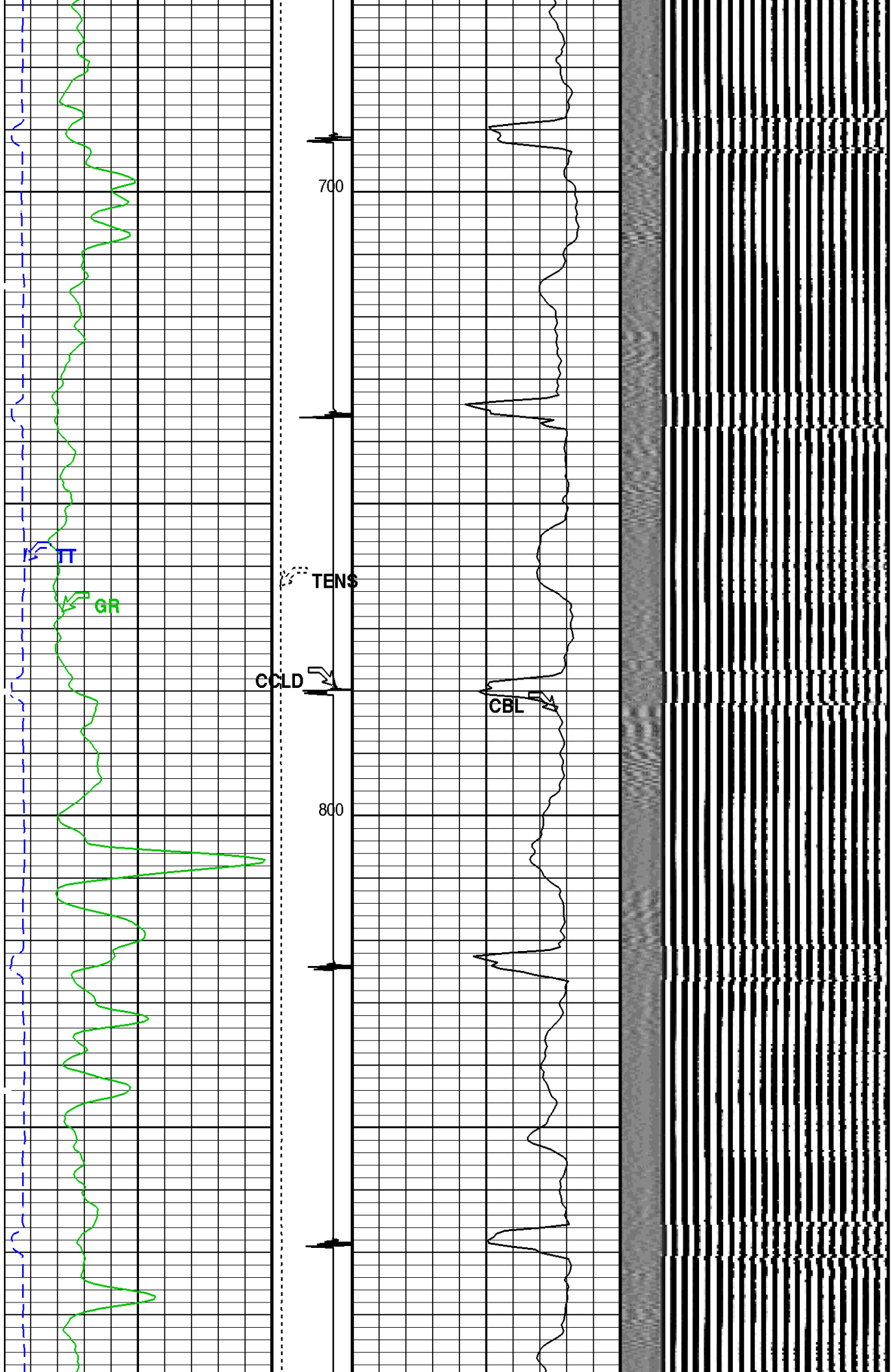
TT
TENS
GR
CCLD
CBL
600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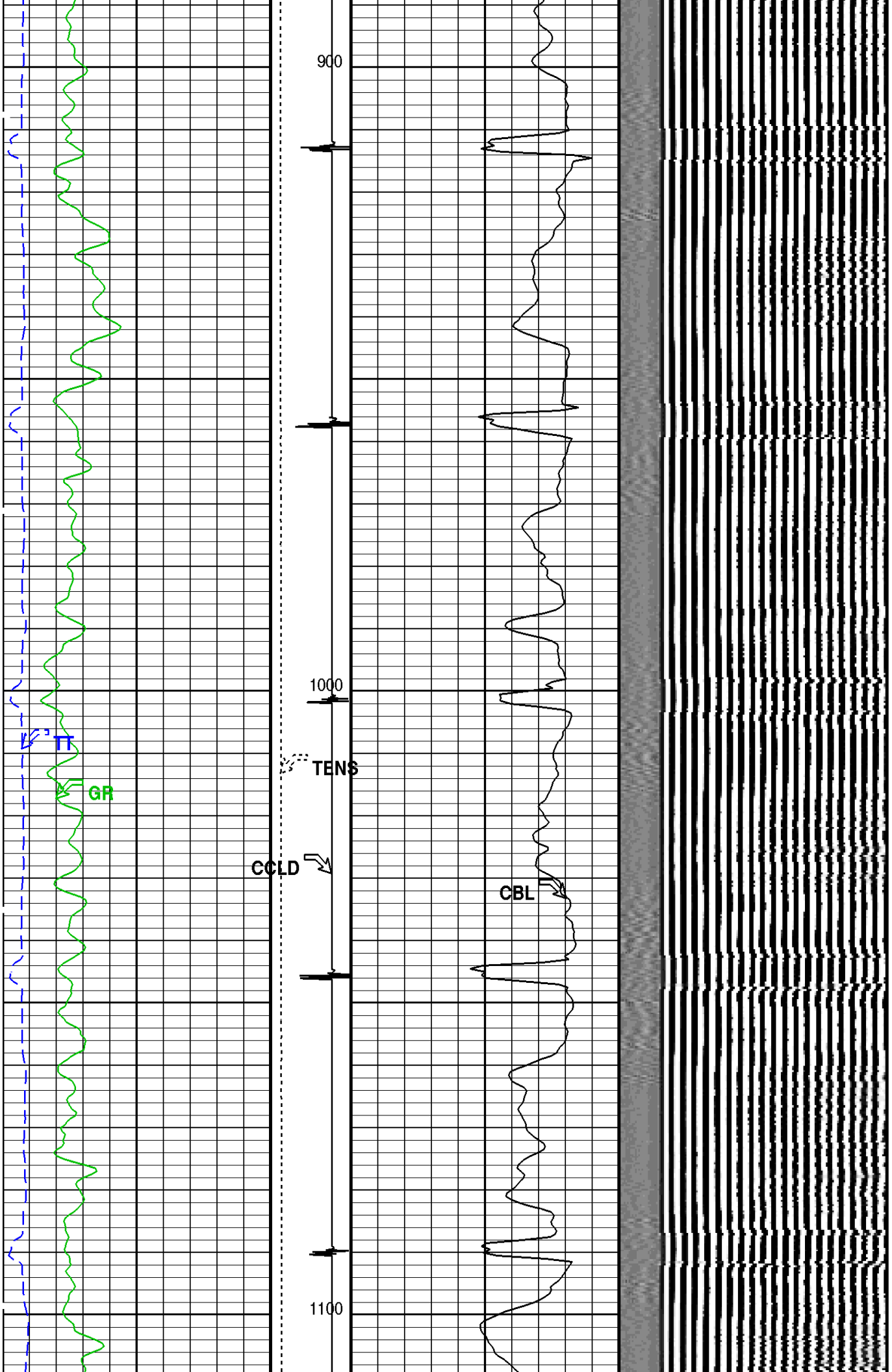
TT
TENS
GR
CCLD
CBL
800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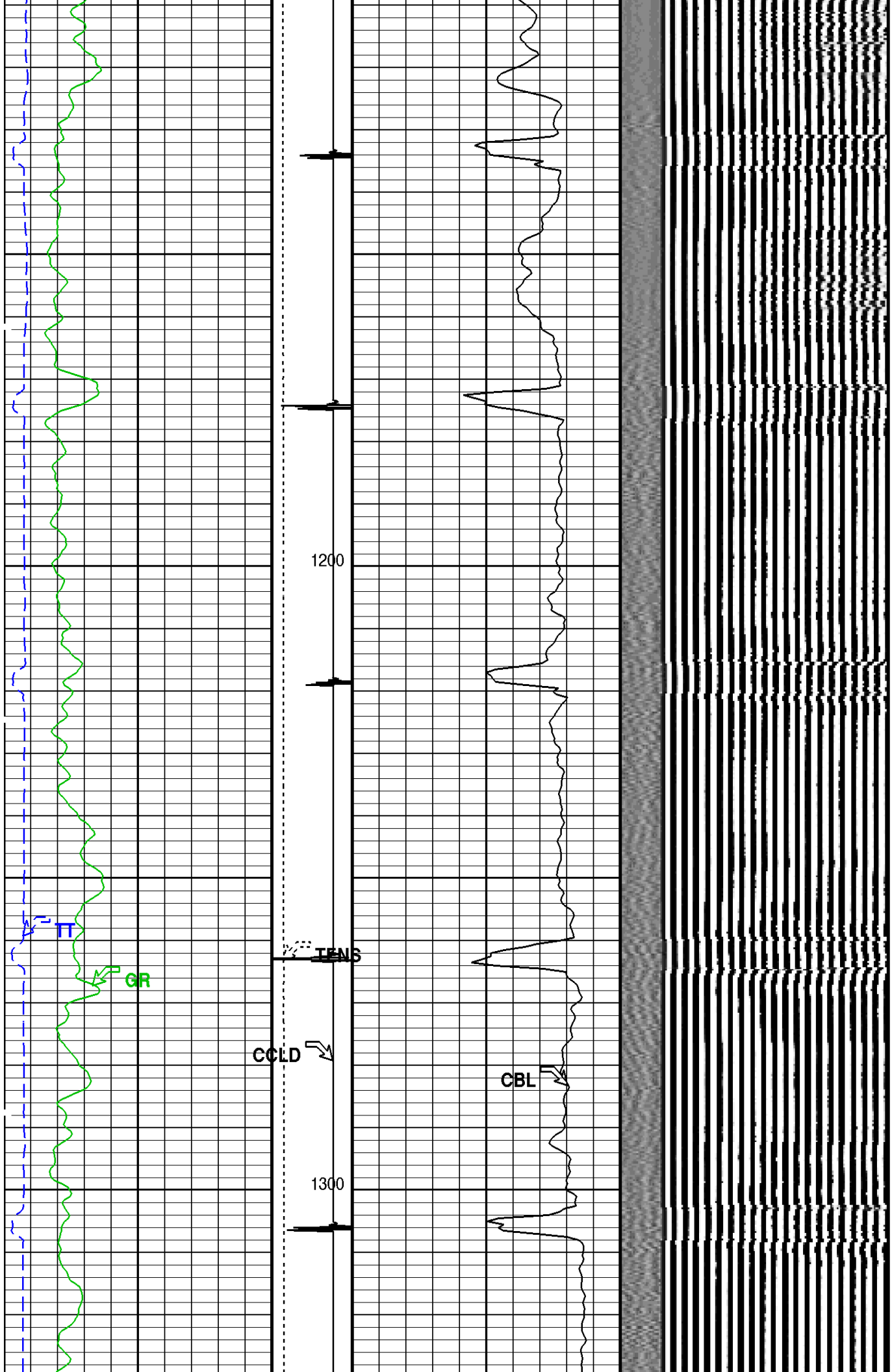
1000
1100
TT
GR
TENS
CCLD
CBL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TT
GR
TENS
CCLD
CBL
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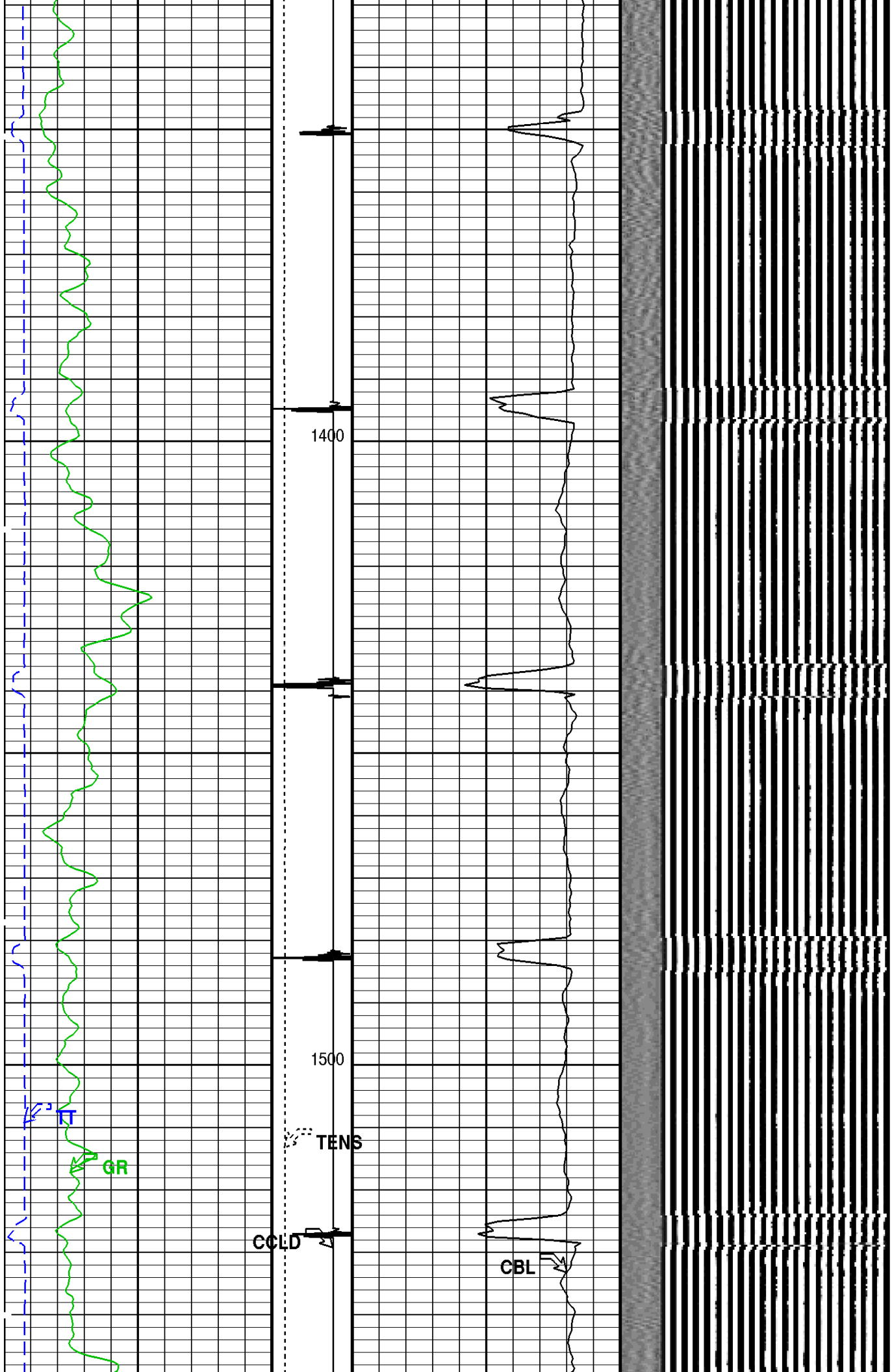
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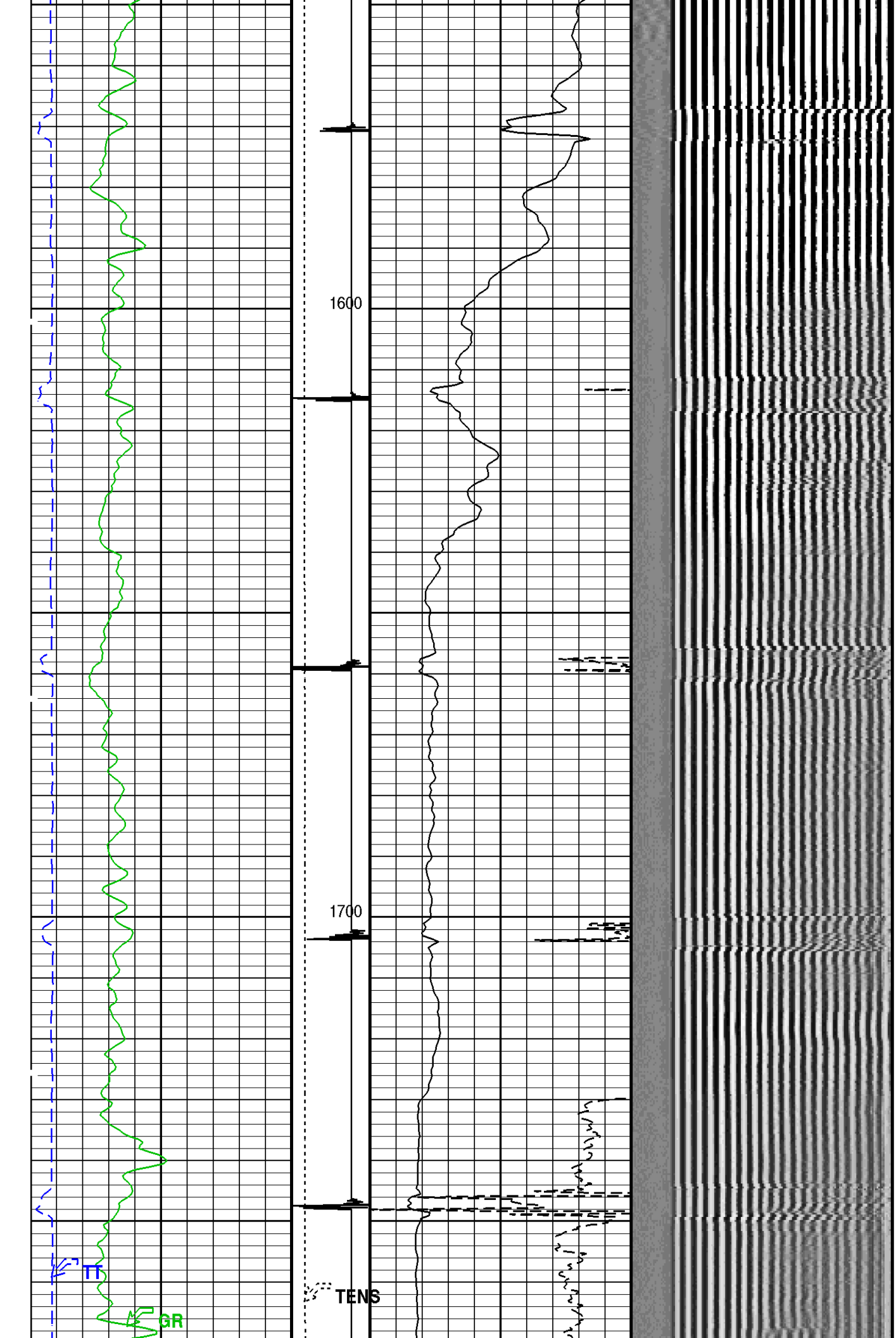
1500
TT
GR
TENS
CCLD
CBL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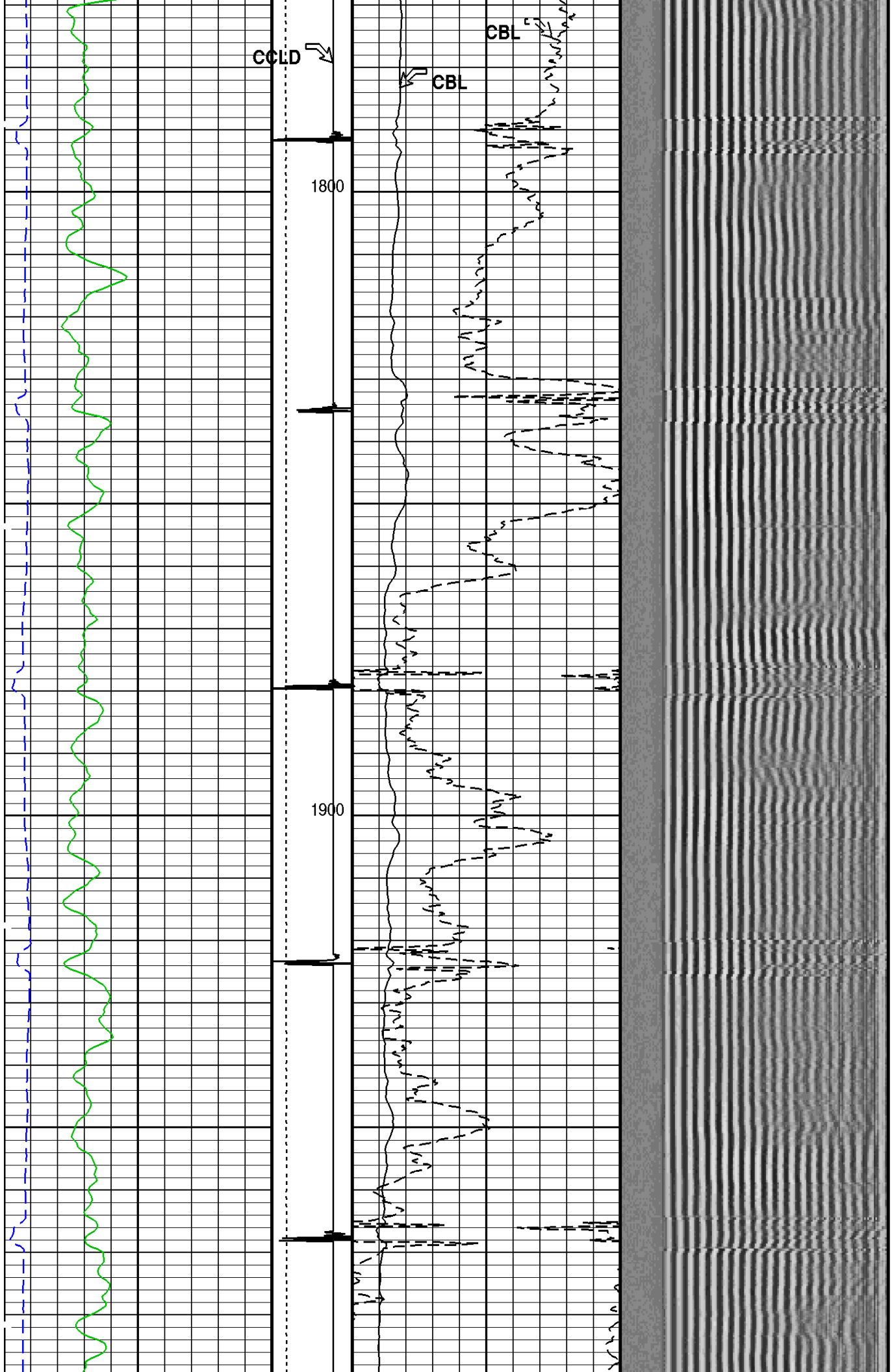
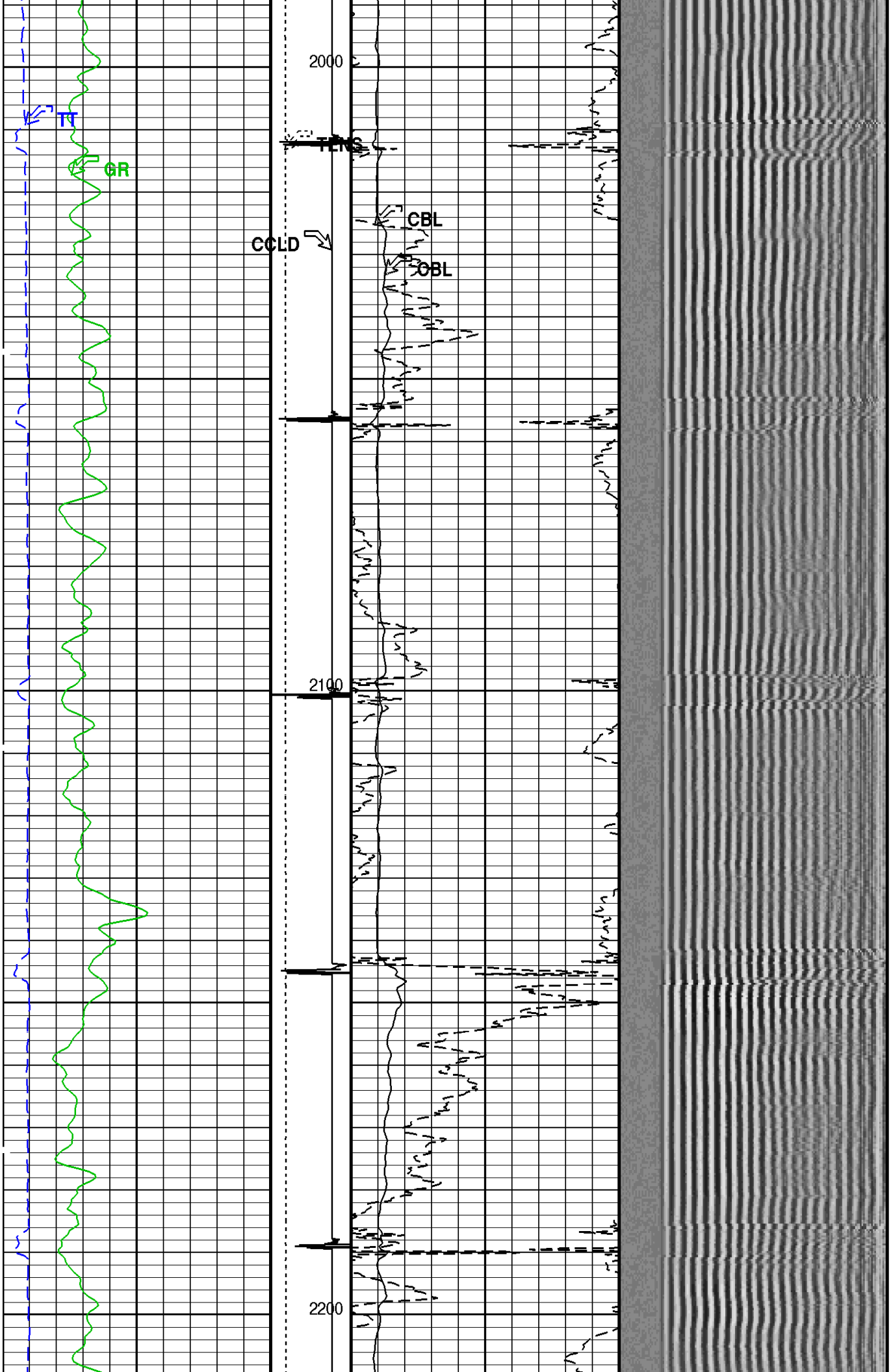
1700
TT
GR
TENS


CCLD
CBL
CBL
1800
1900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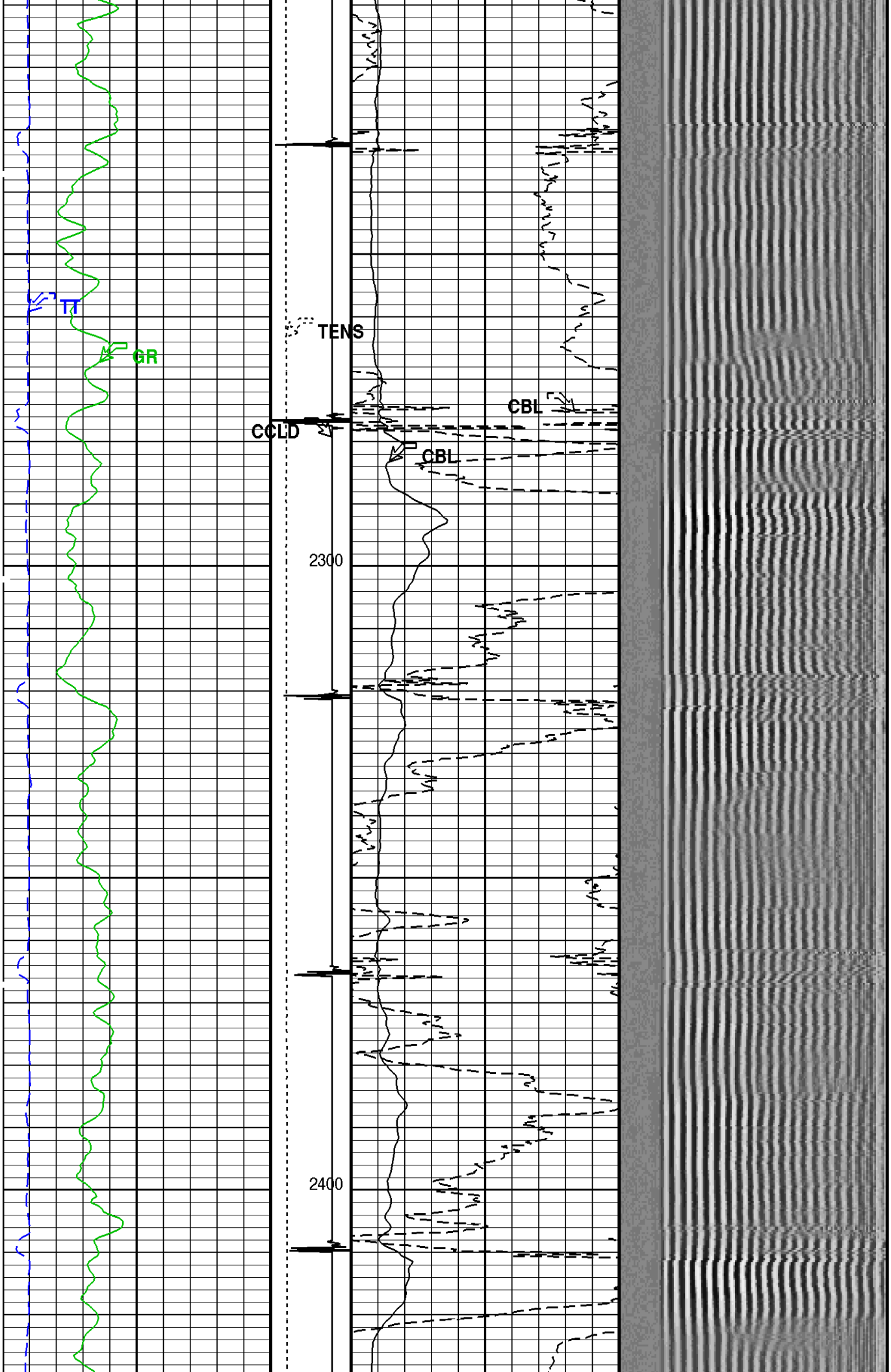
TENS
CBL
CCLD
CBL
2100
2200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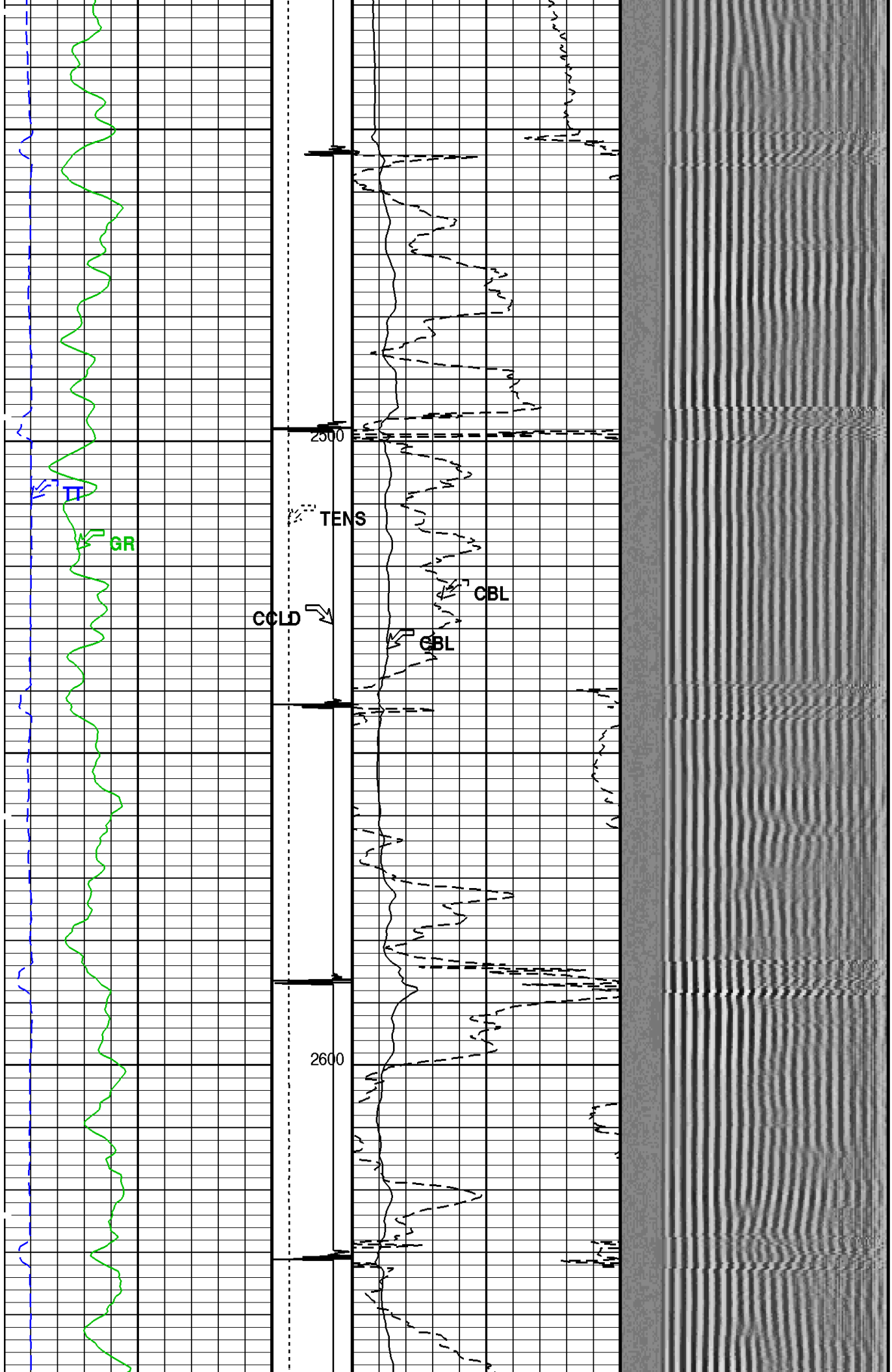
GR
TENS
CCLD
CBL
CBL
2300
2400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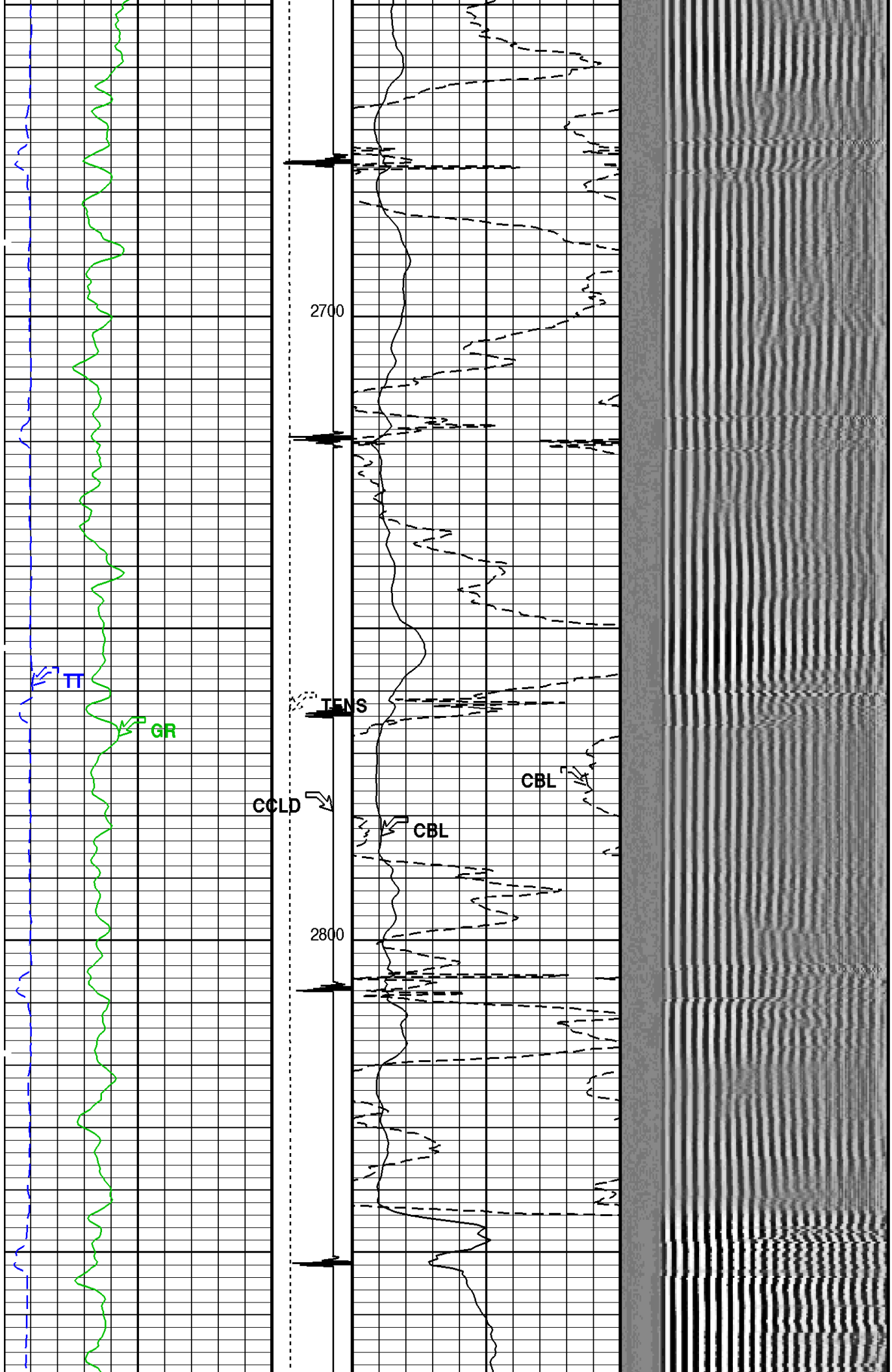
GR
2500
TENS
CBL
CCLD
CBL
2600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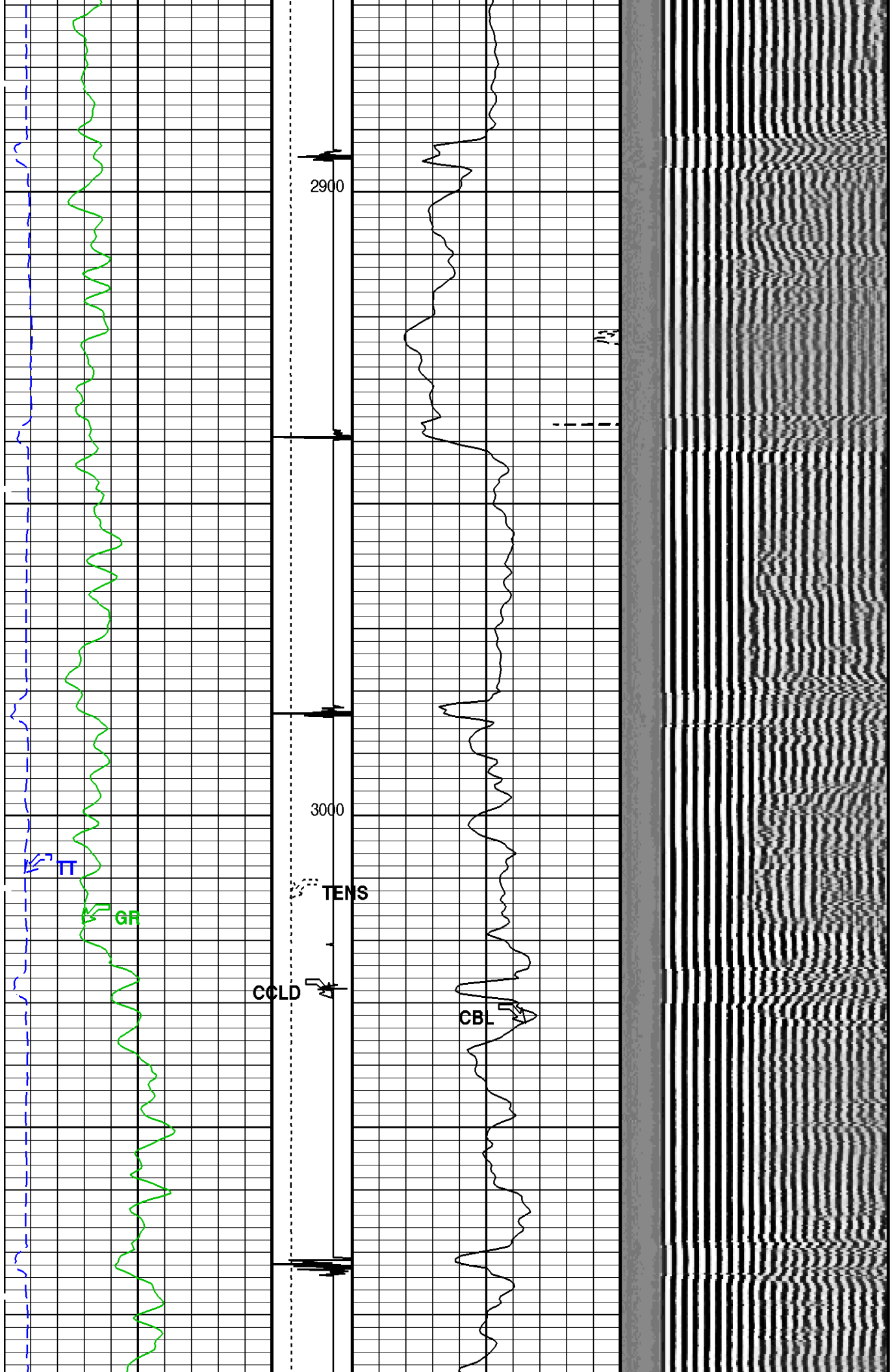
TT
GR
TENS
CBL
CCLD
CBL
2800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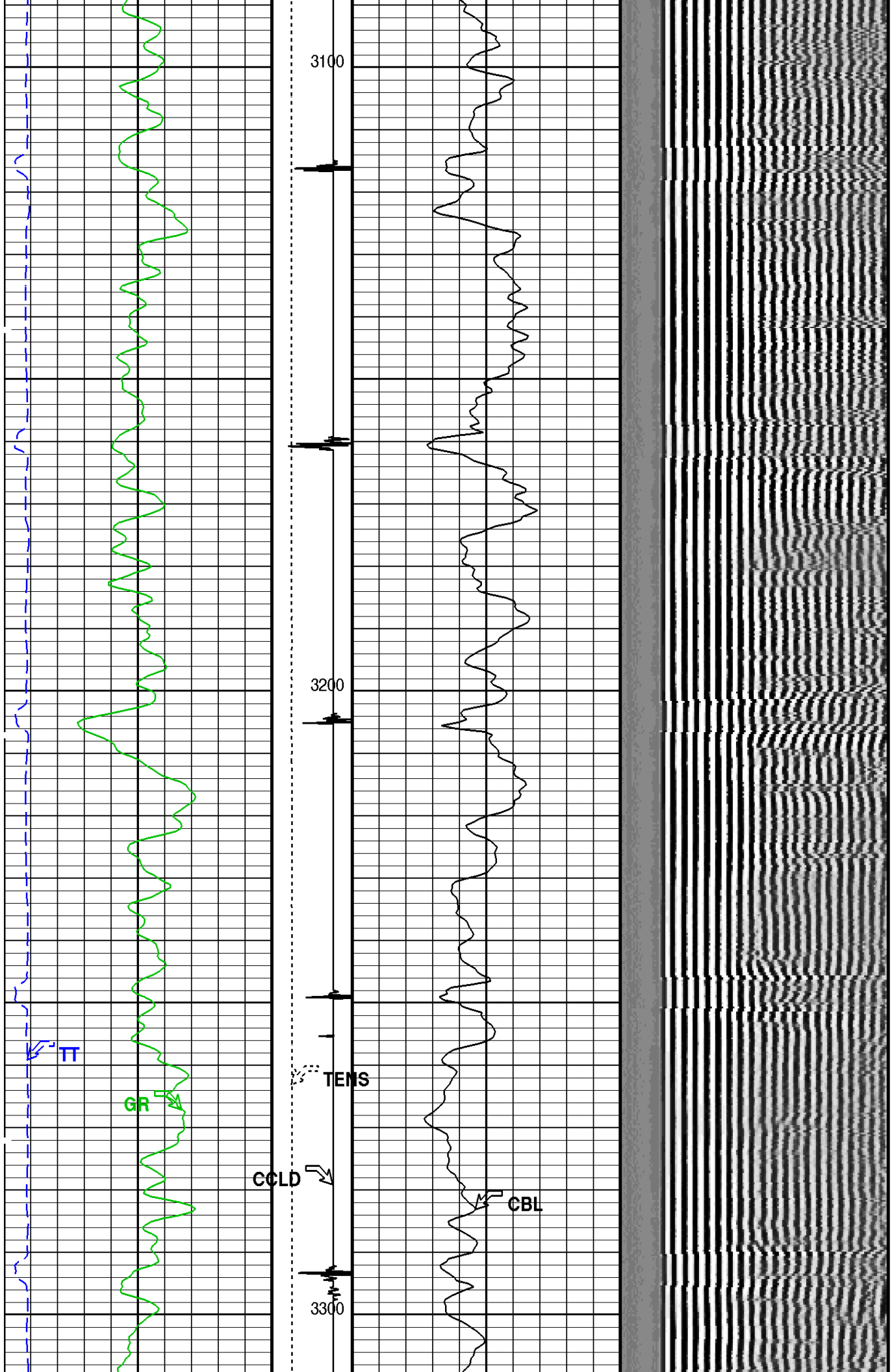
3000
TT
GR
TENS
CCLD
CBL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GR
TENS
CCLD
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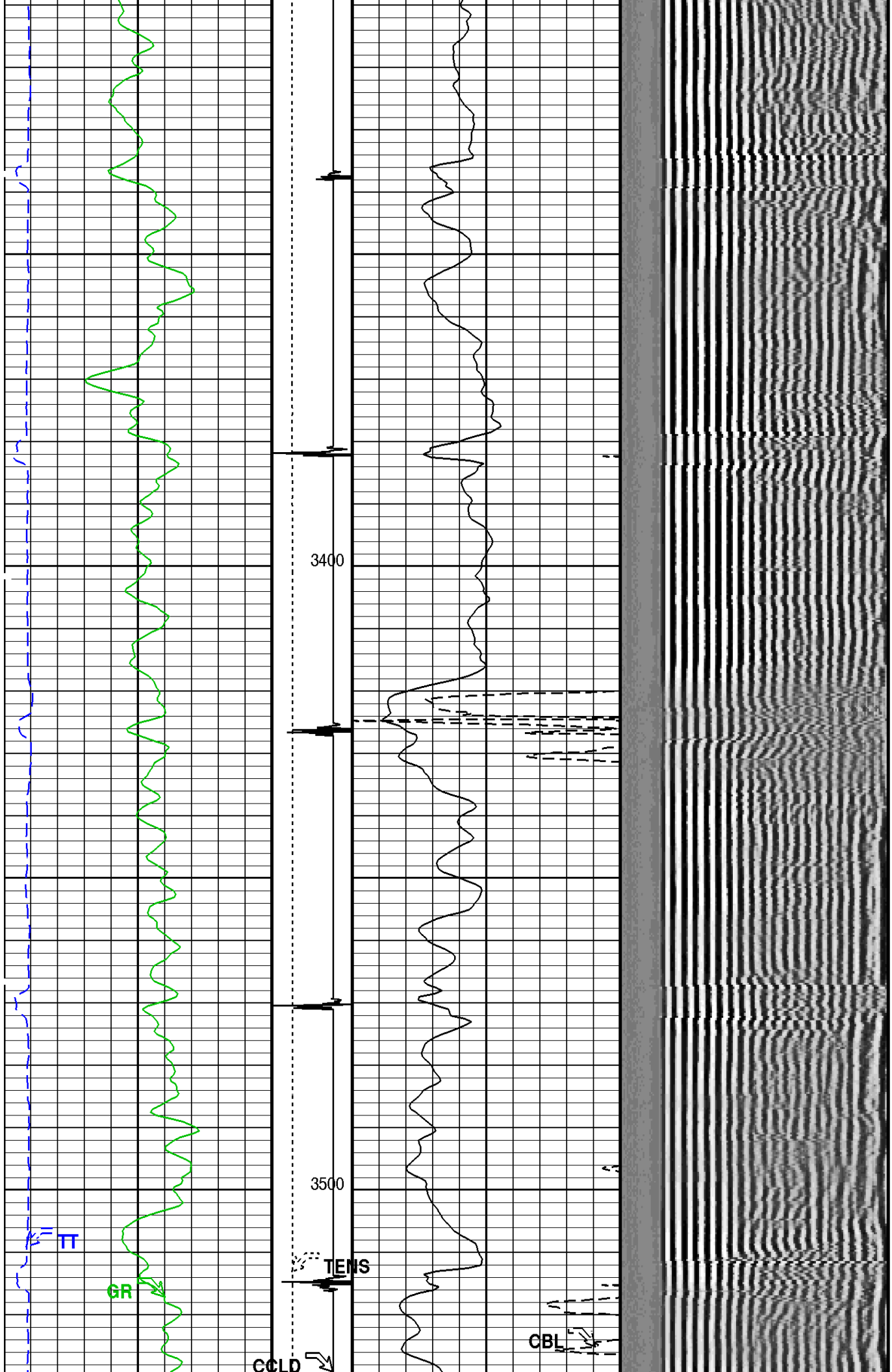
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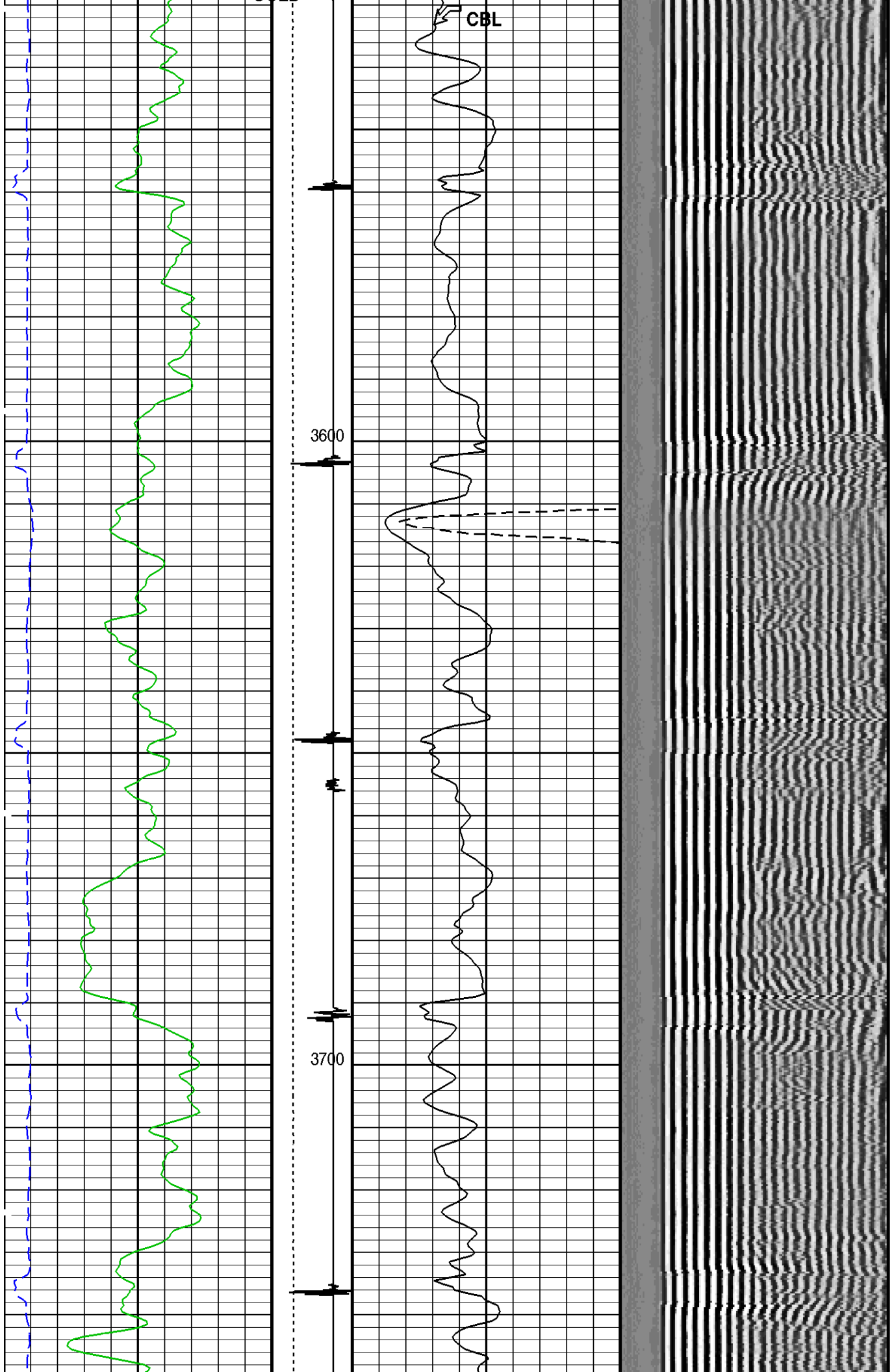
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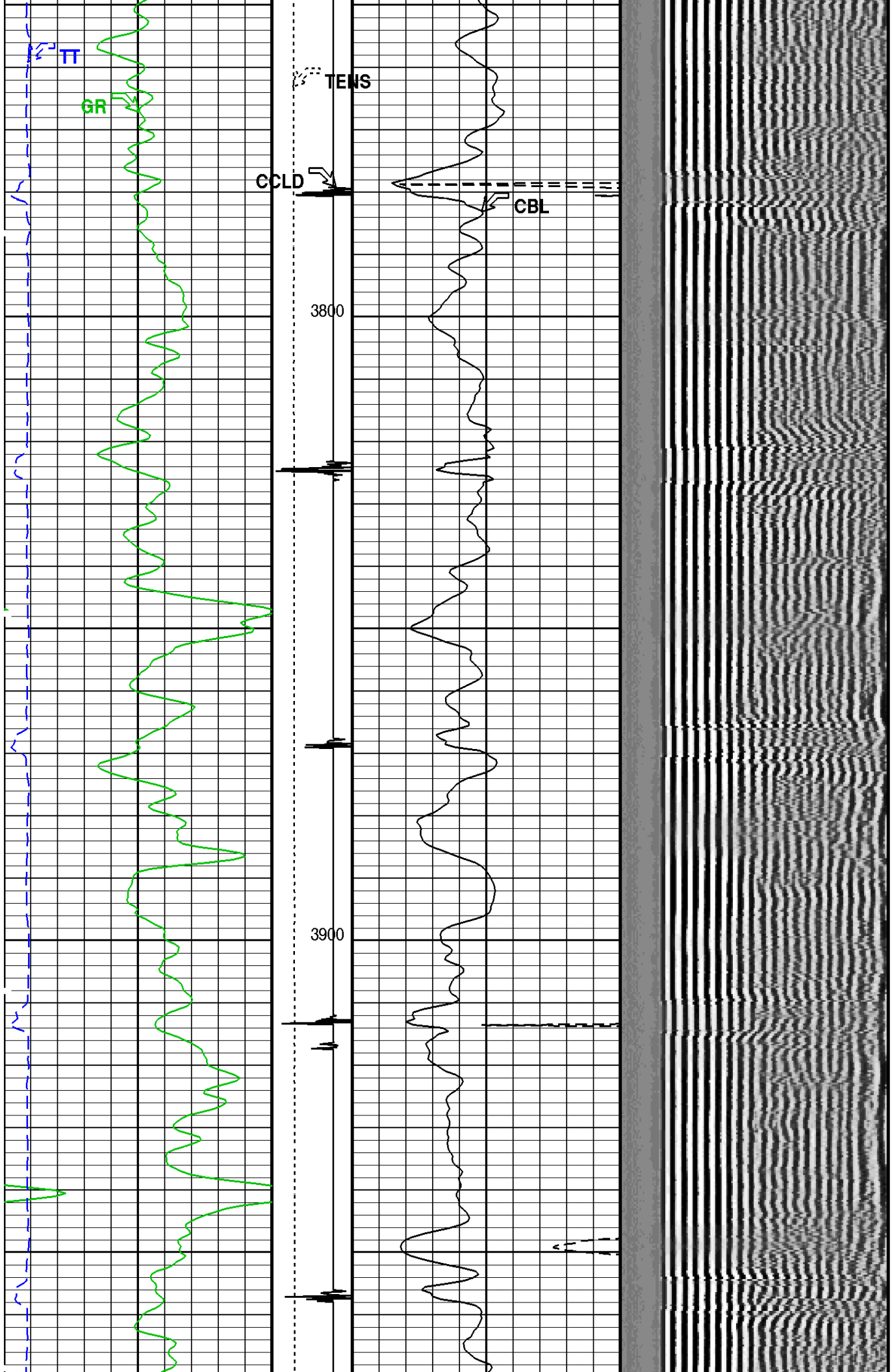
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CCLD
CBL
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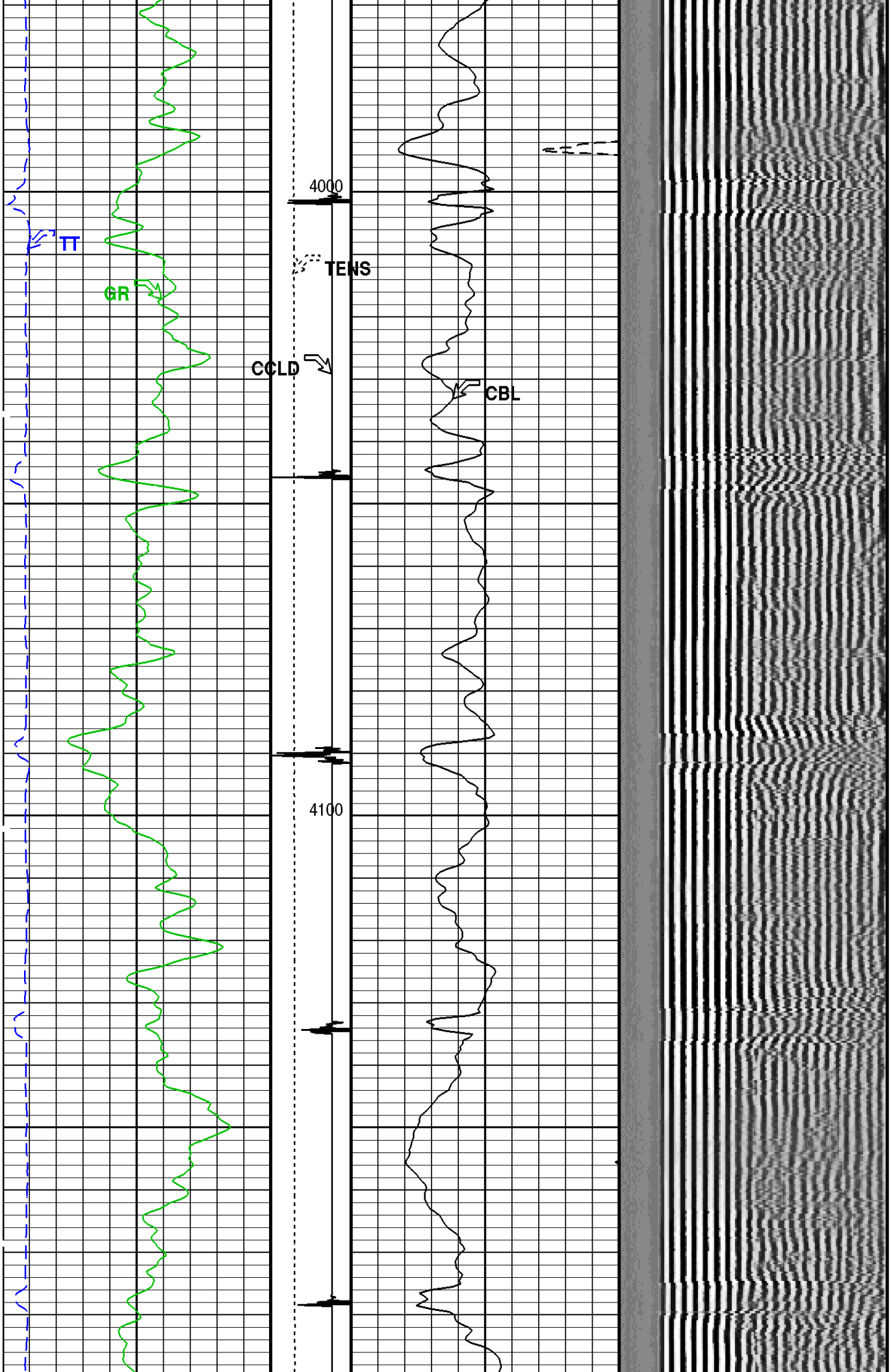
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TT
TENS
GR
CCLD
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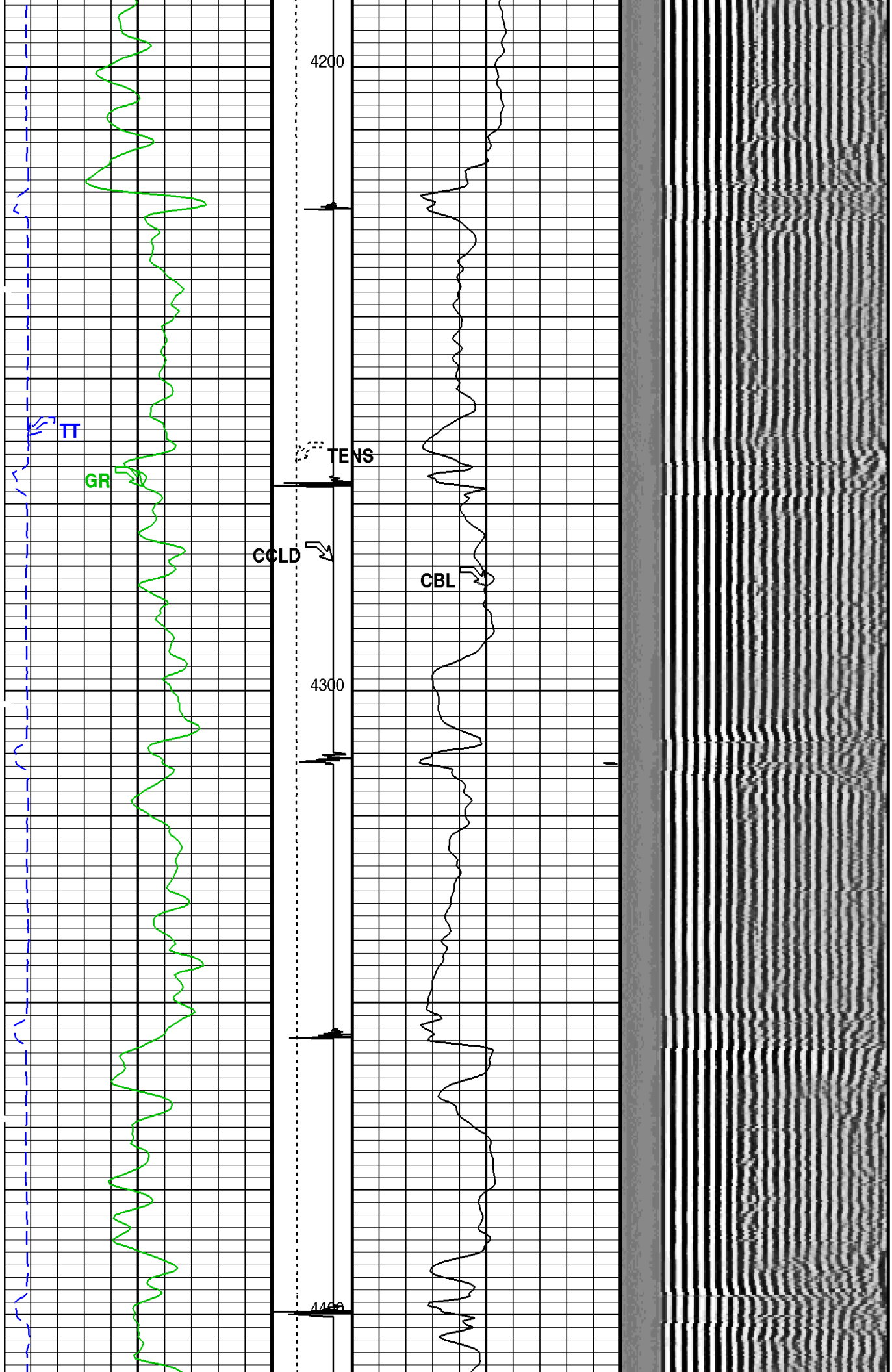
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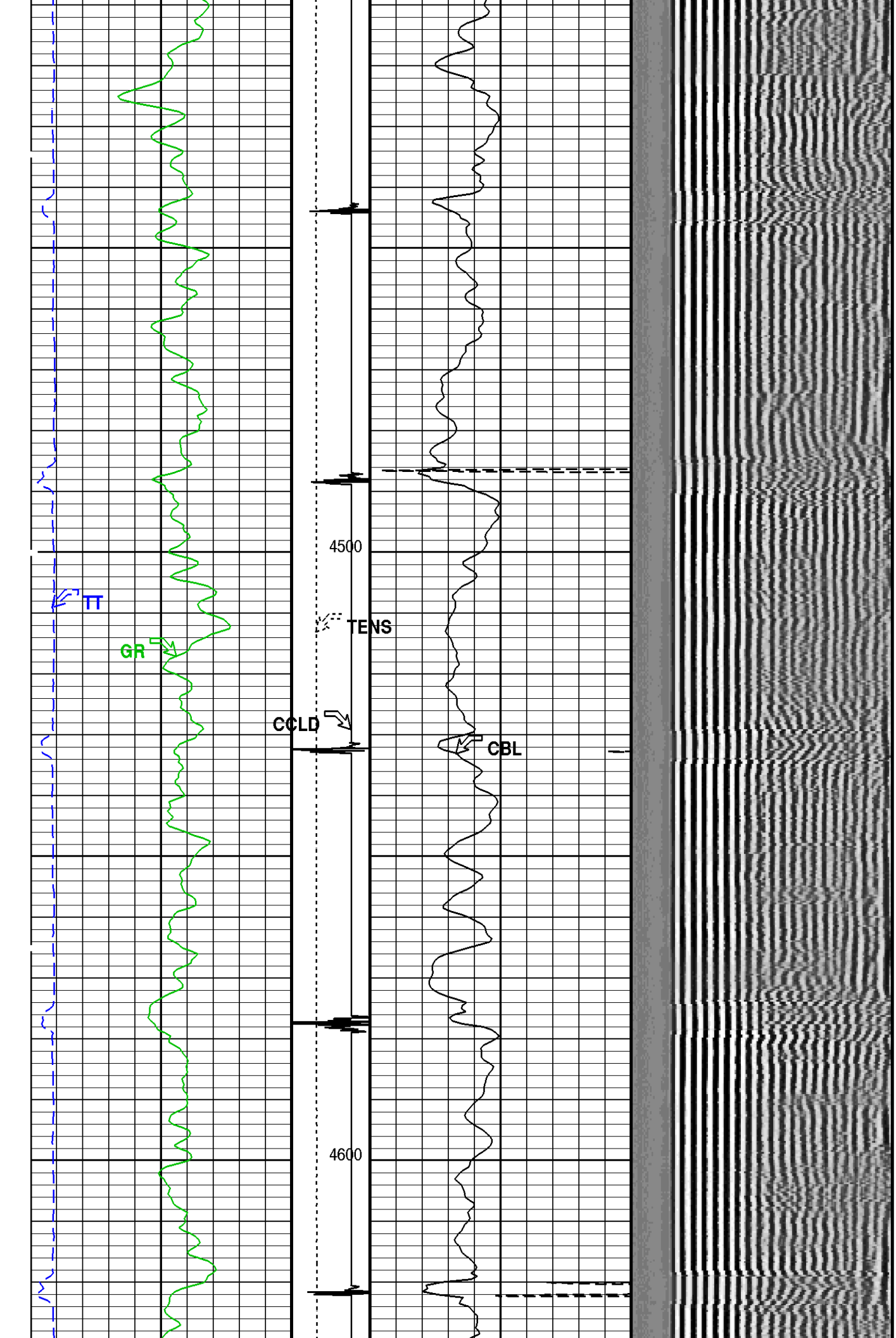
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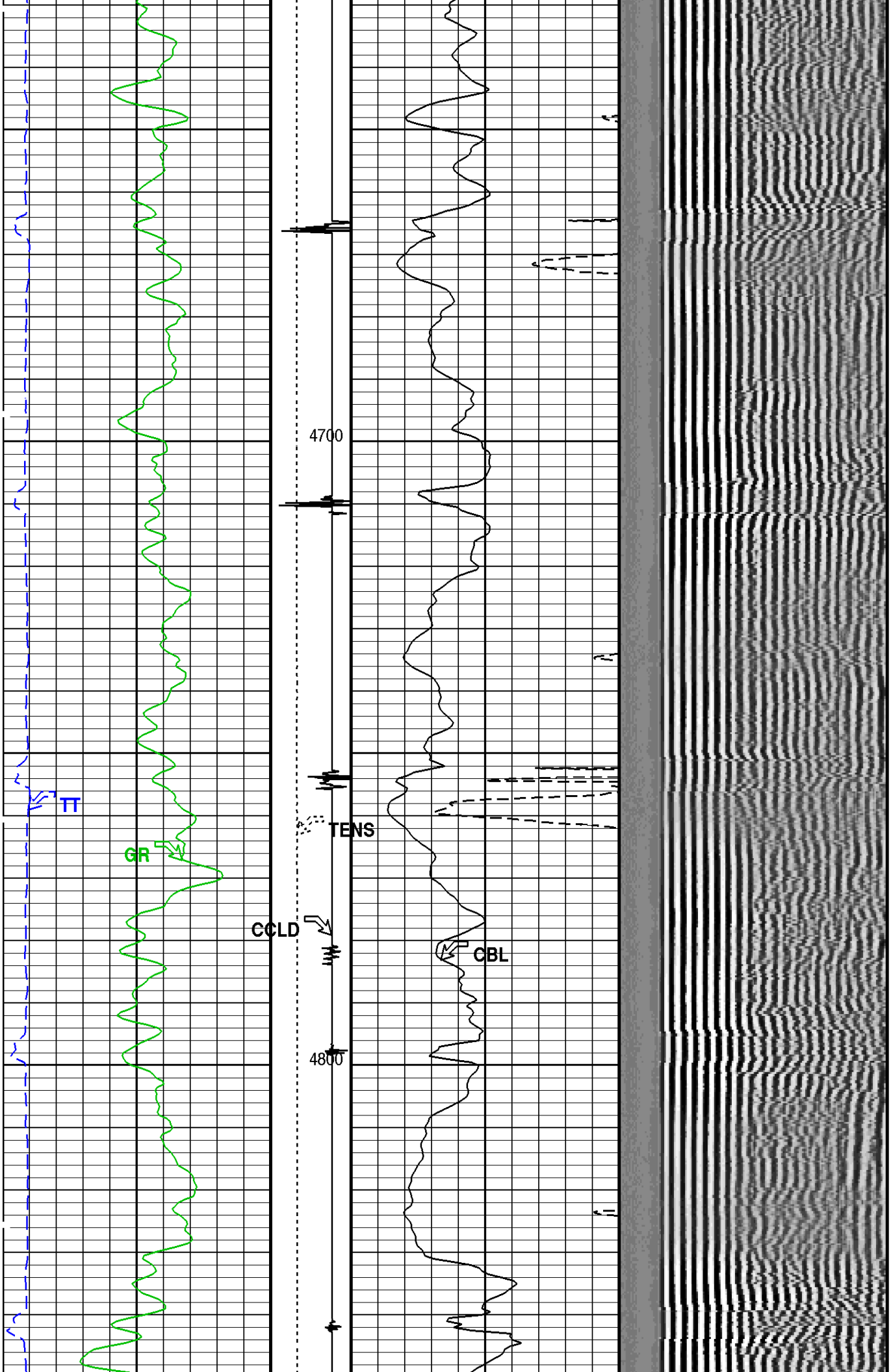
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CCLD
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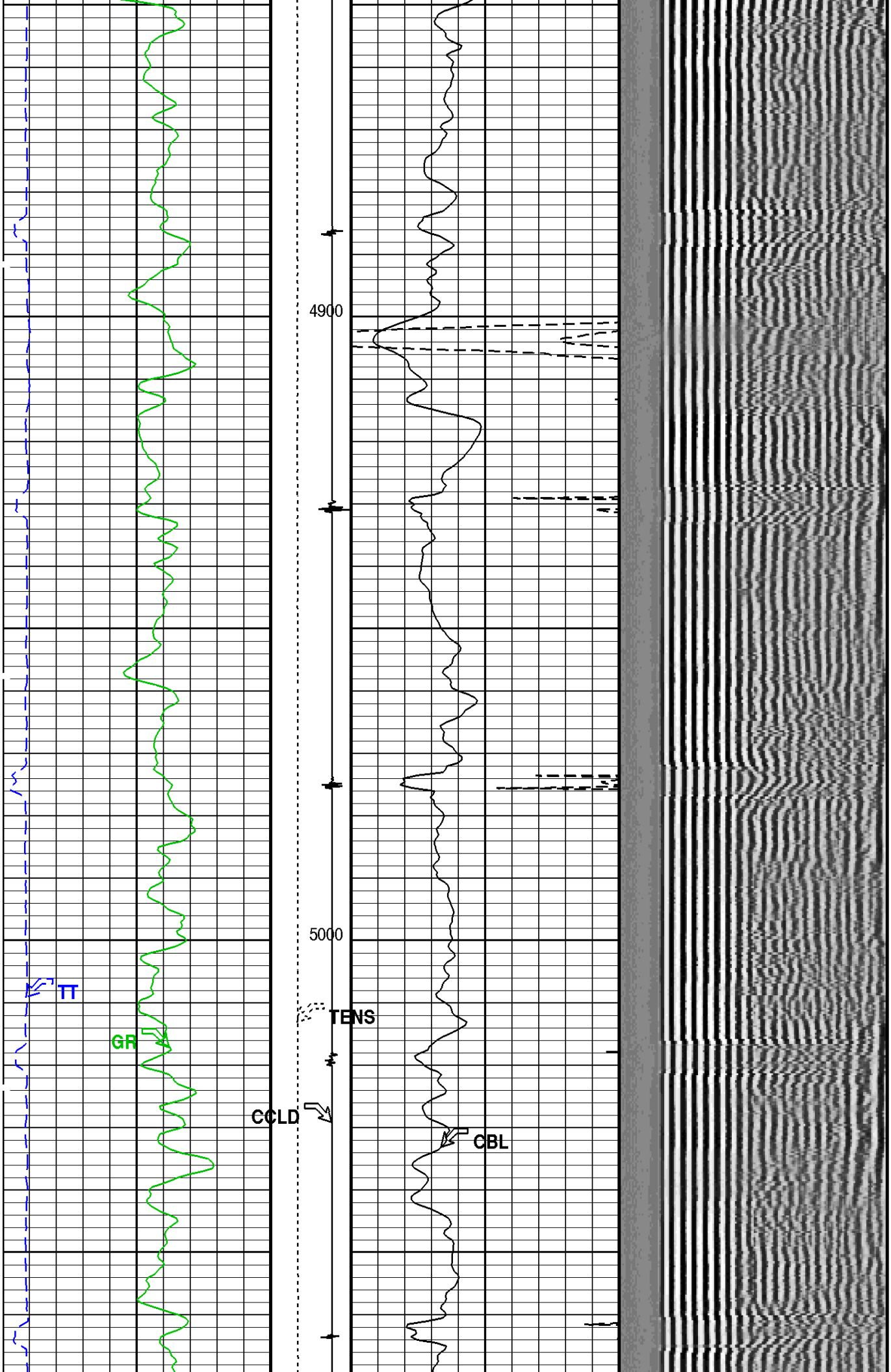
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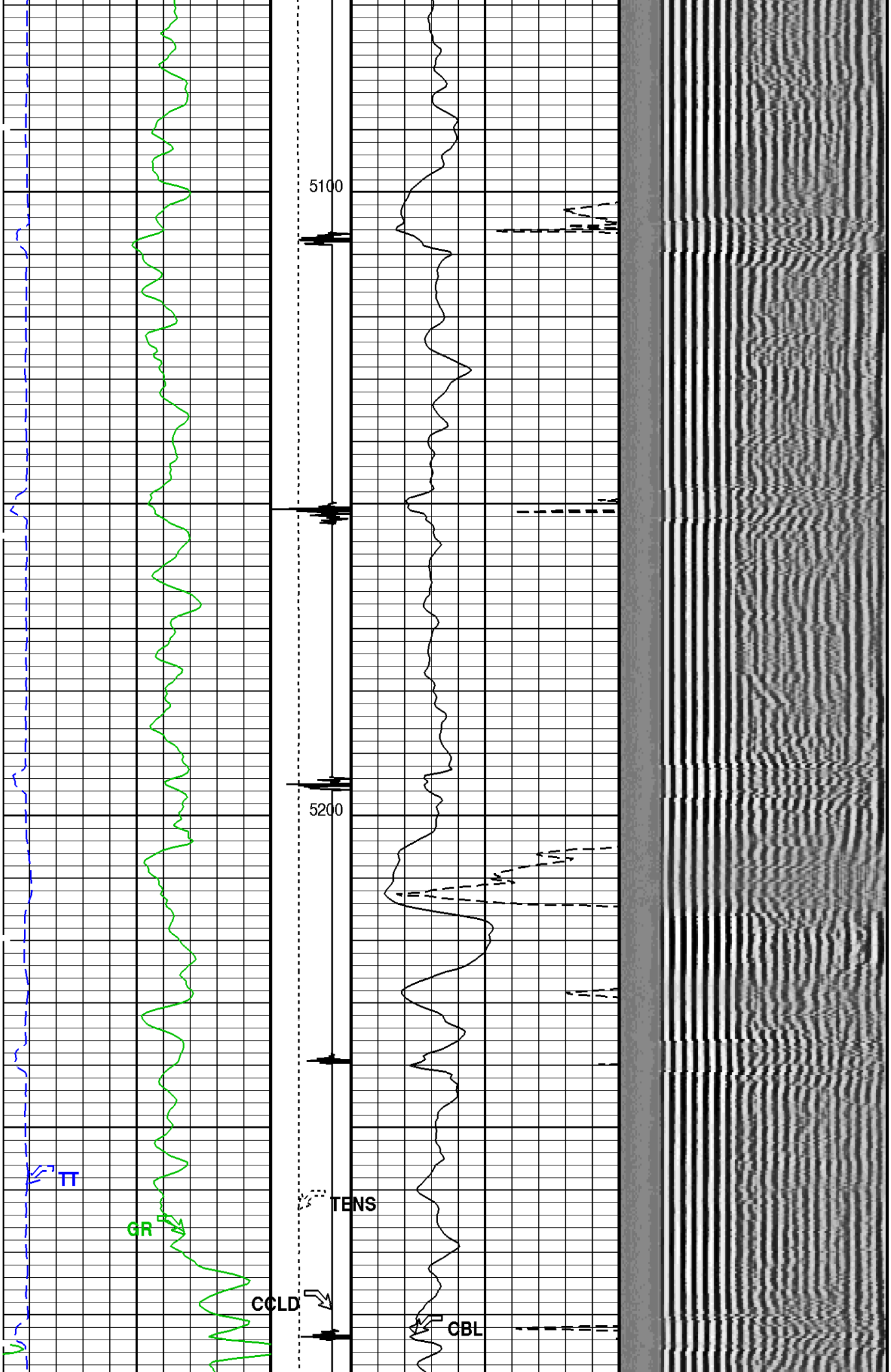
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GR
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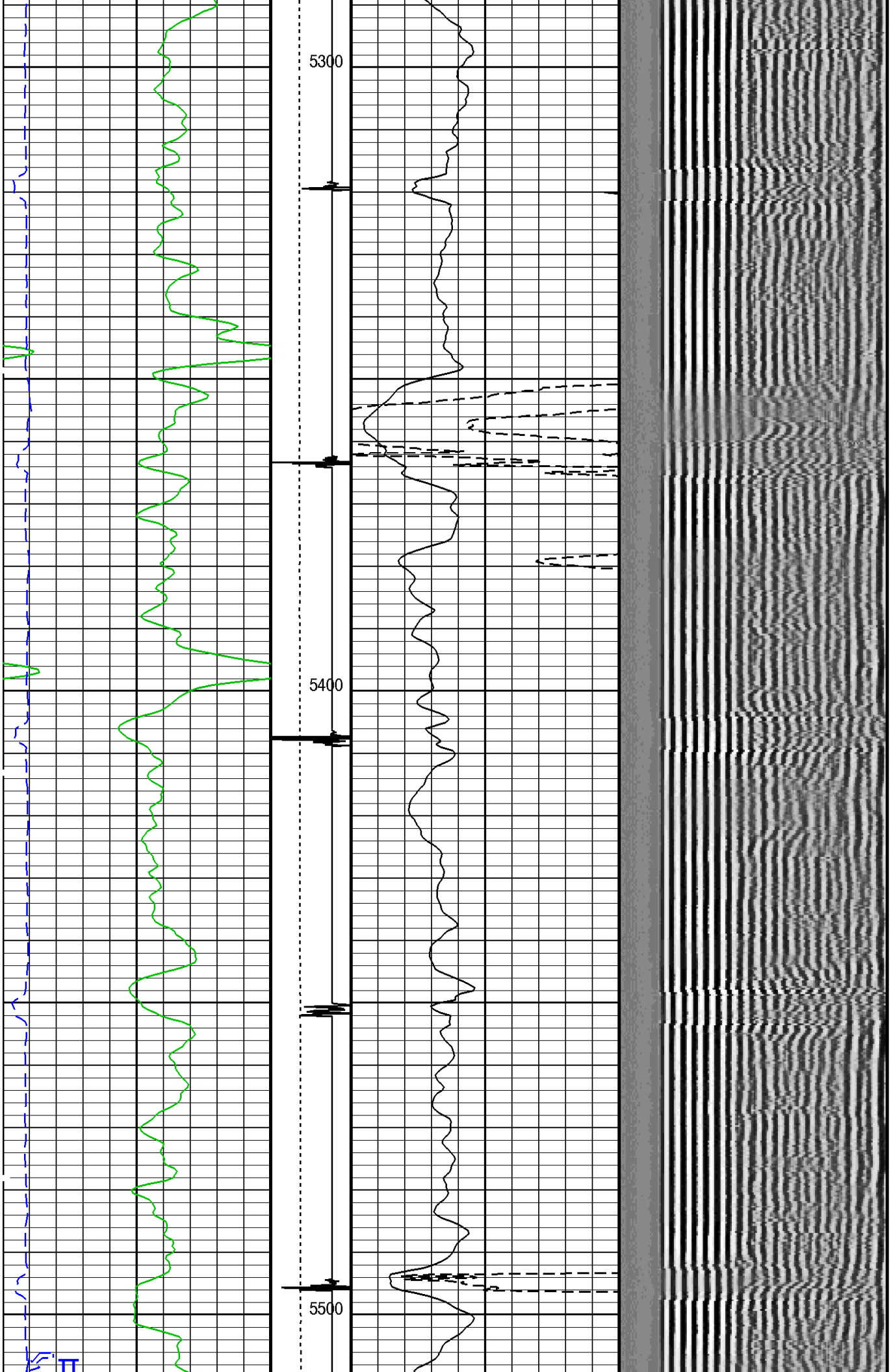
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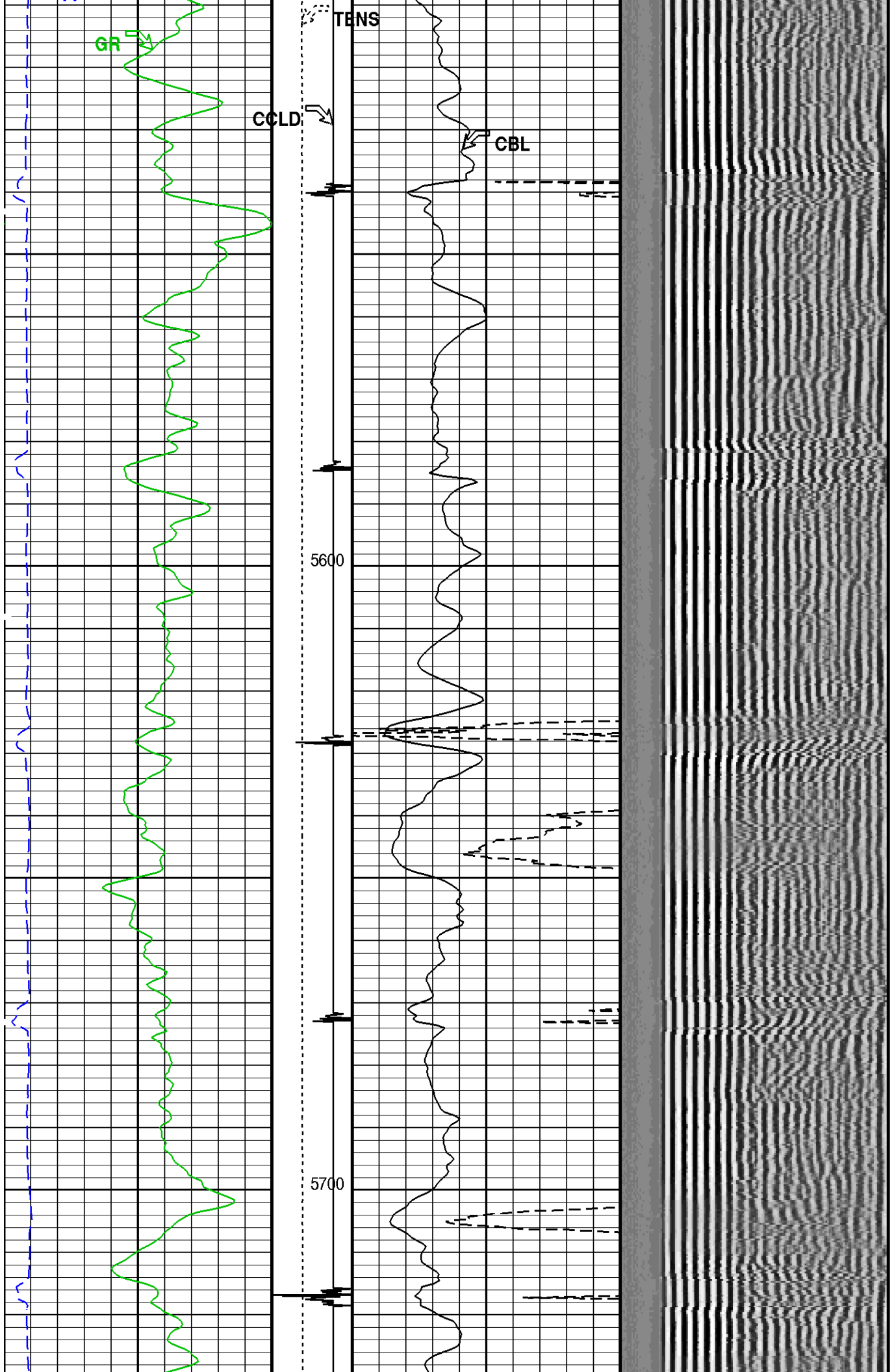
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GR
CCLD
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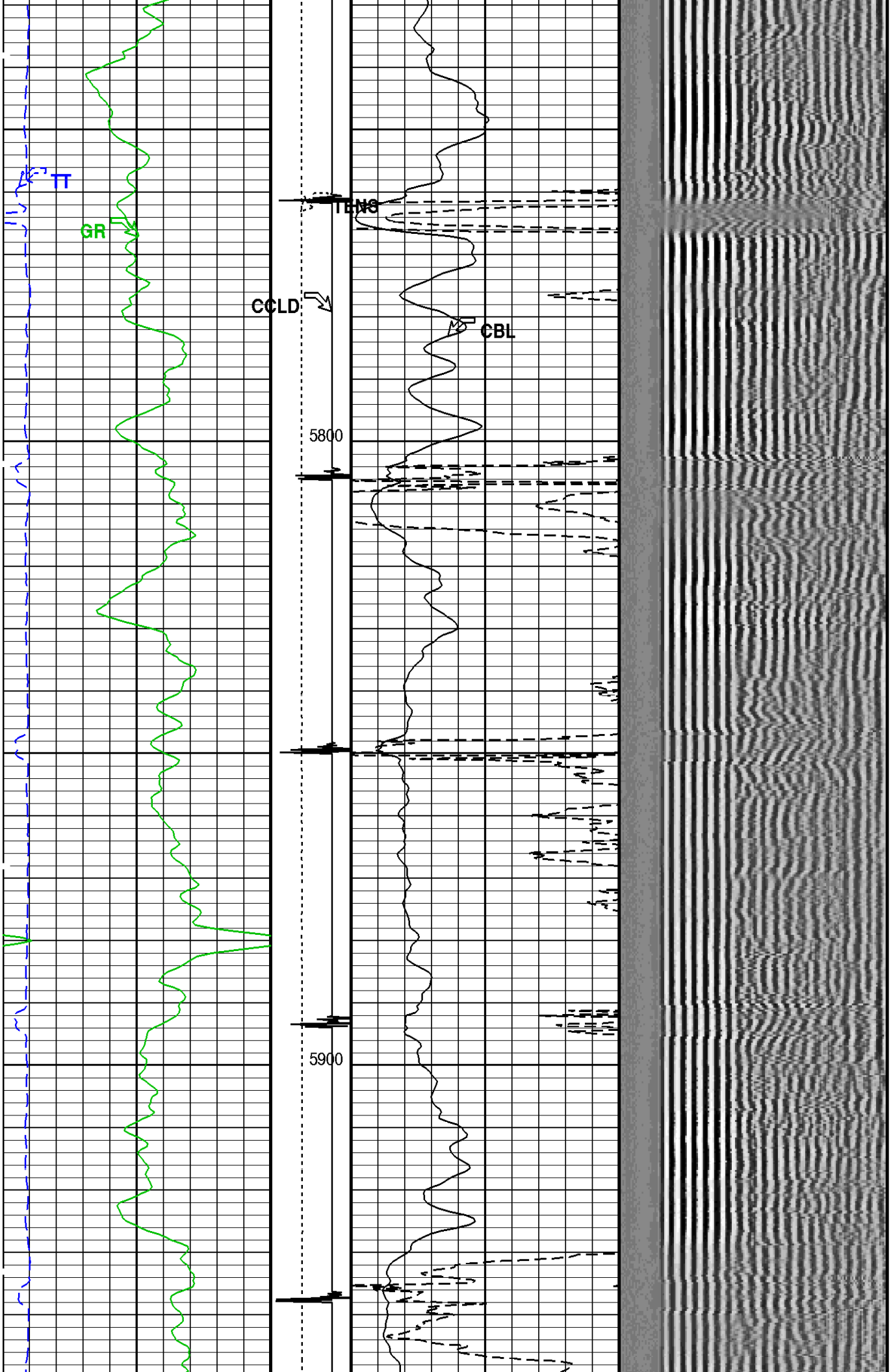
5600
5700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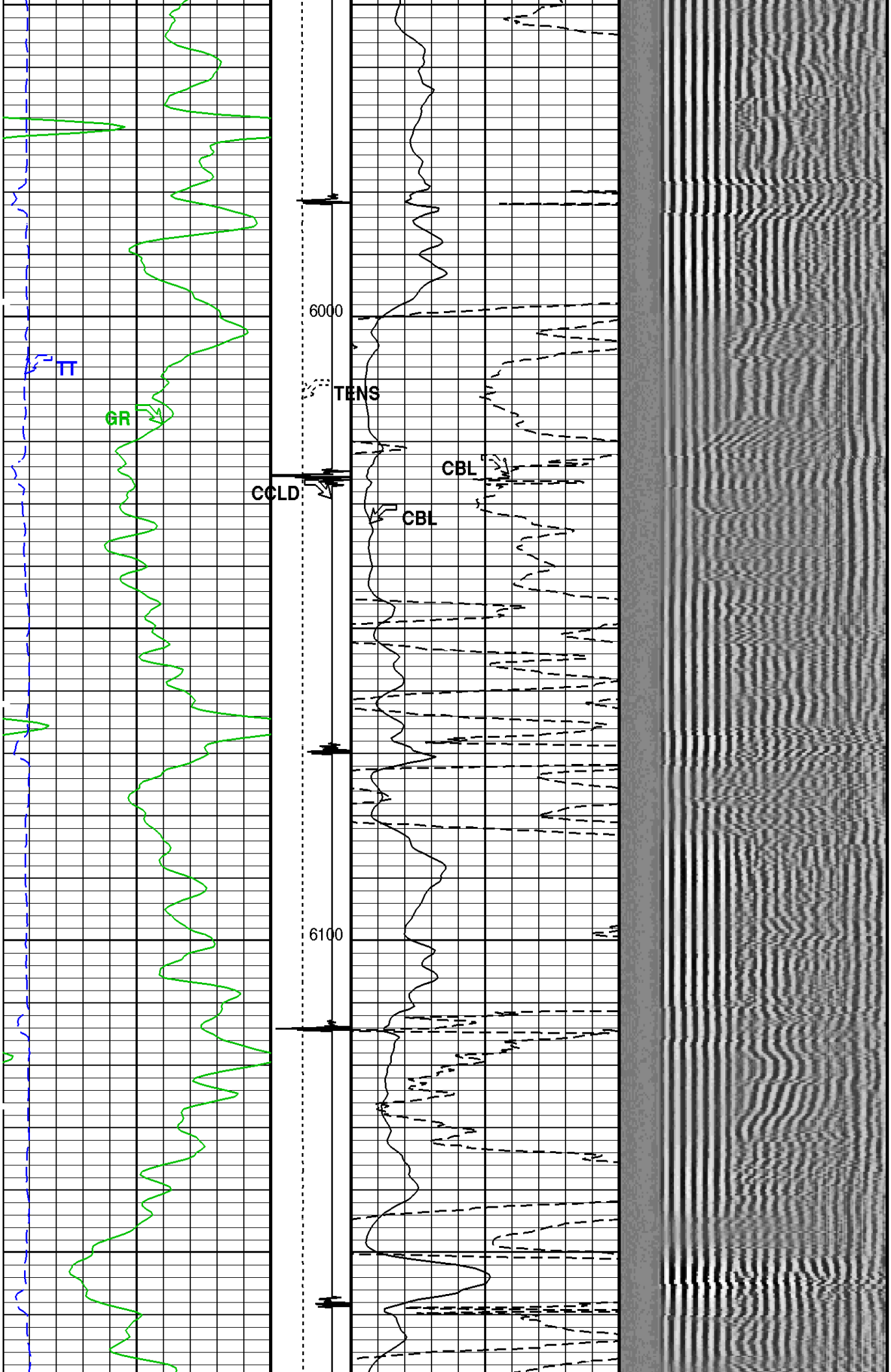
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TENS
CBL
CCLD
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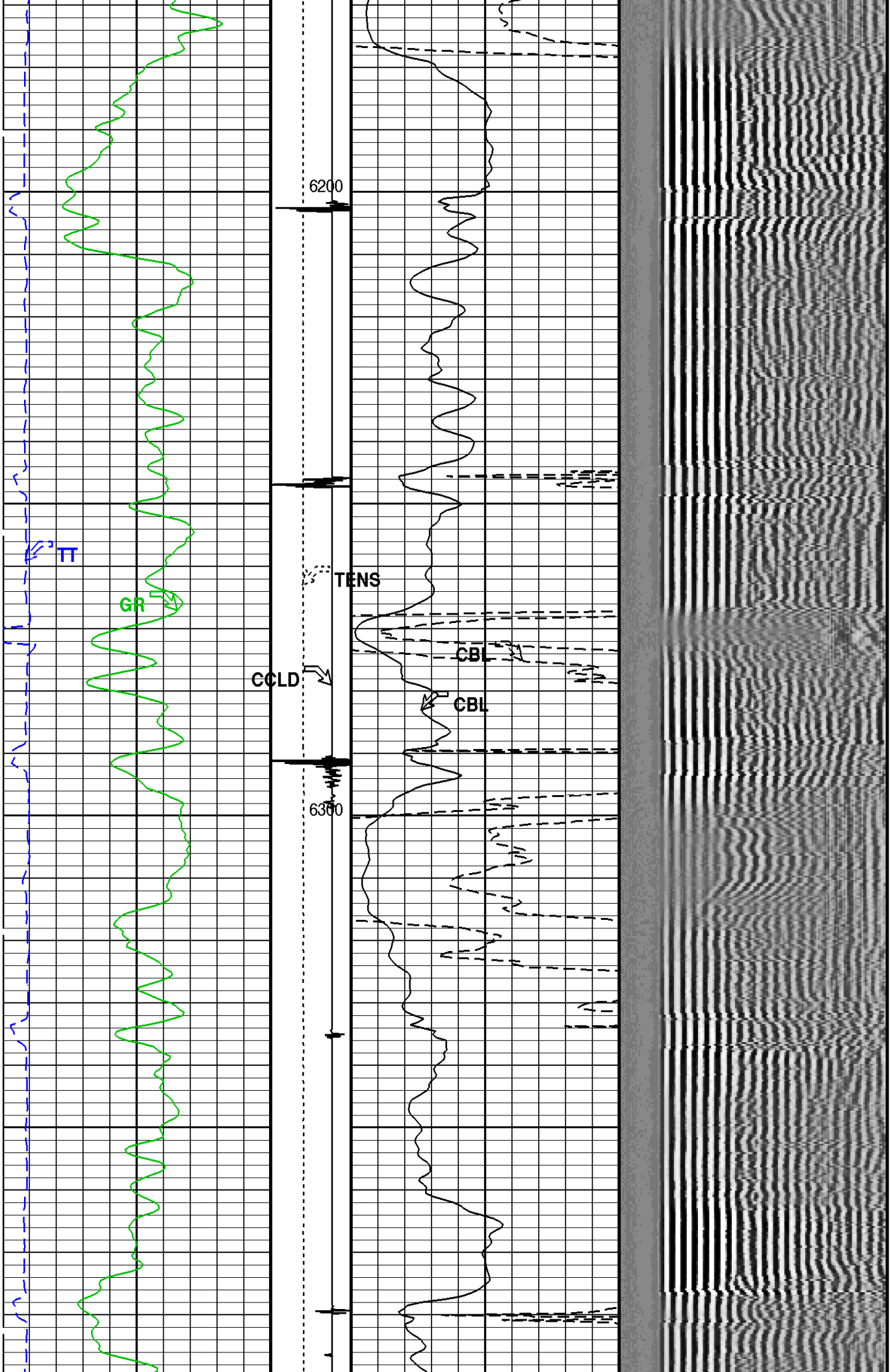
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CBL
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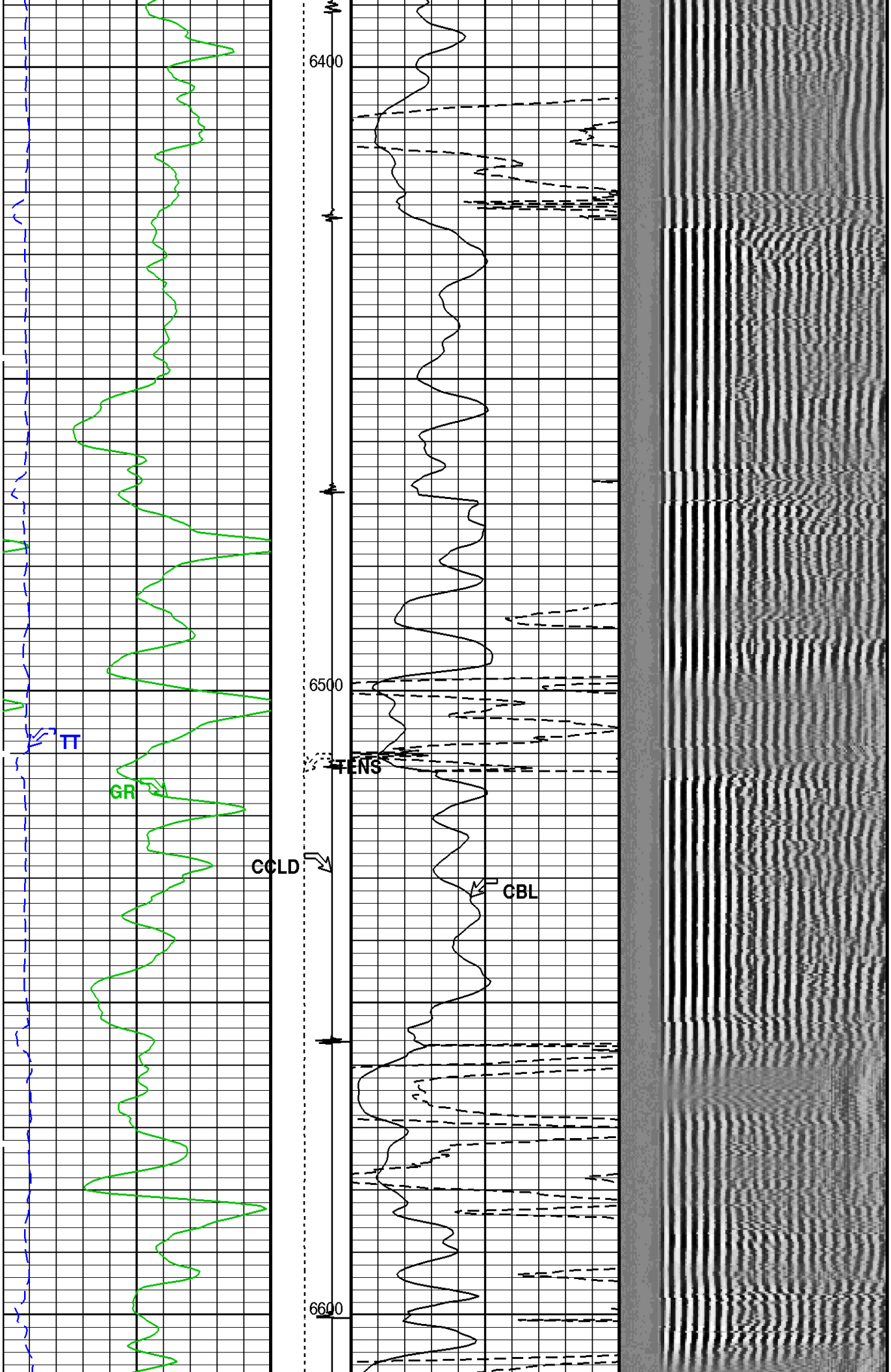
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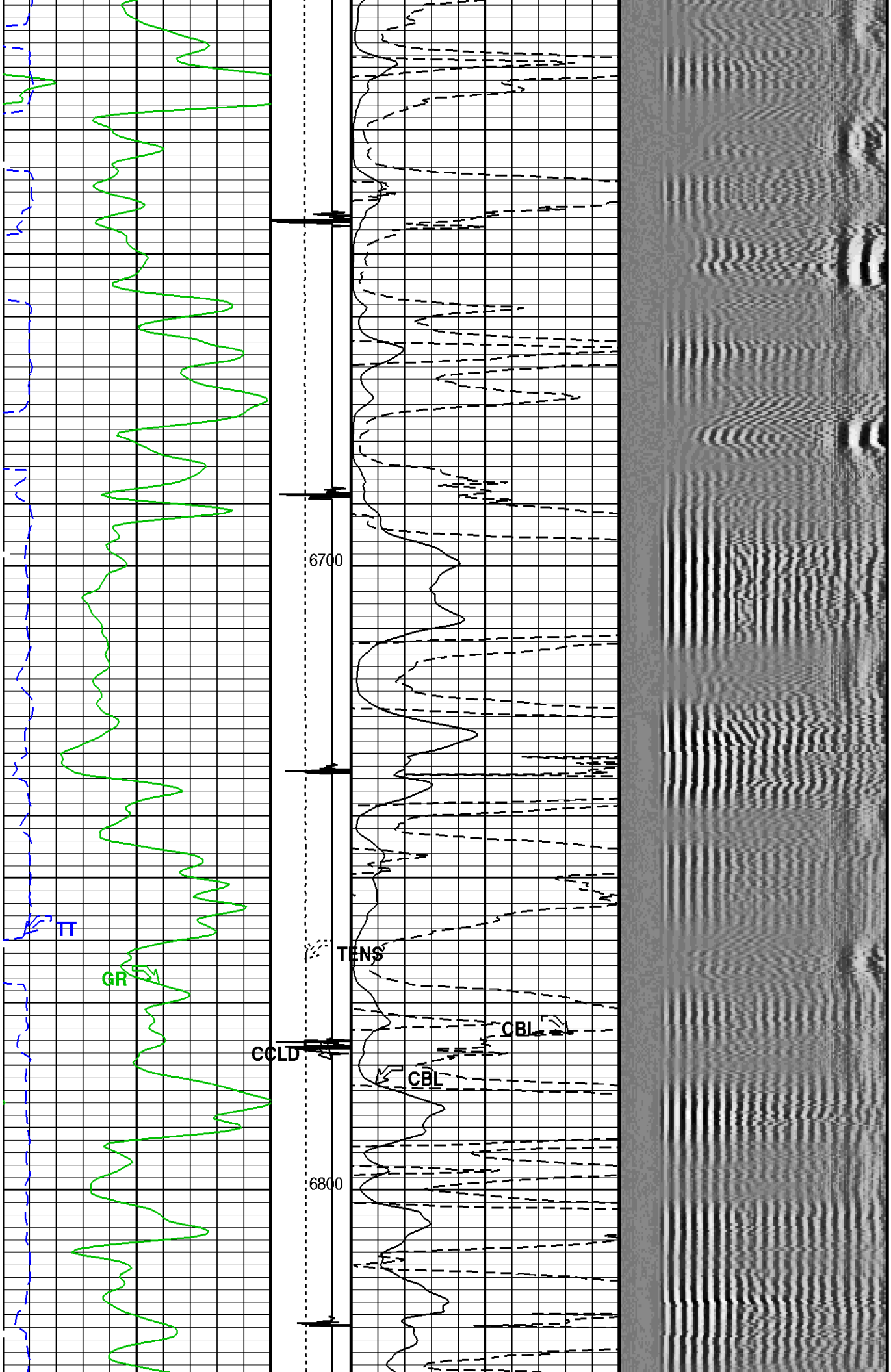
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TENS
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CBL
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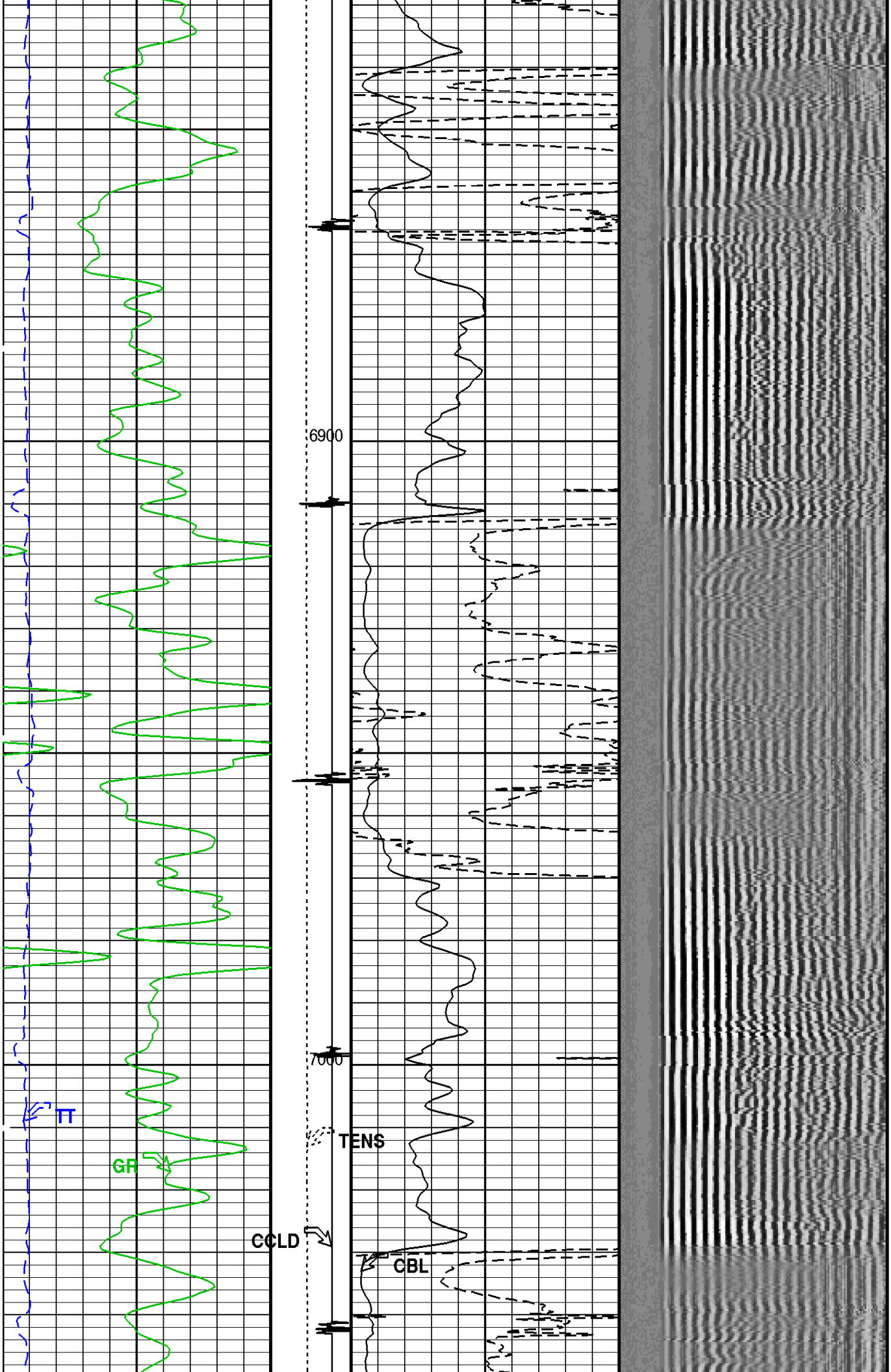
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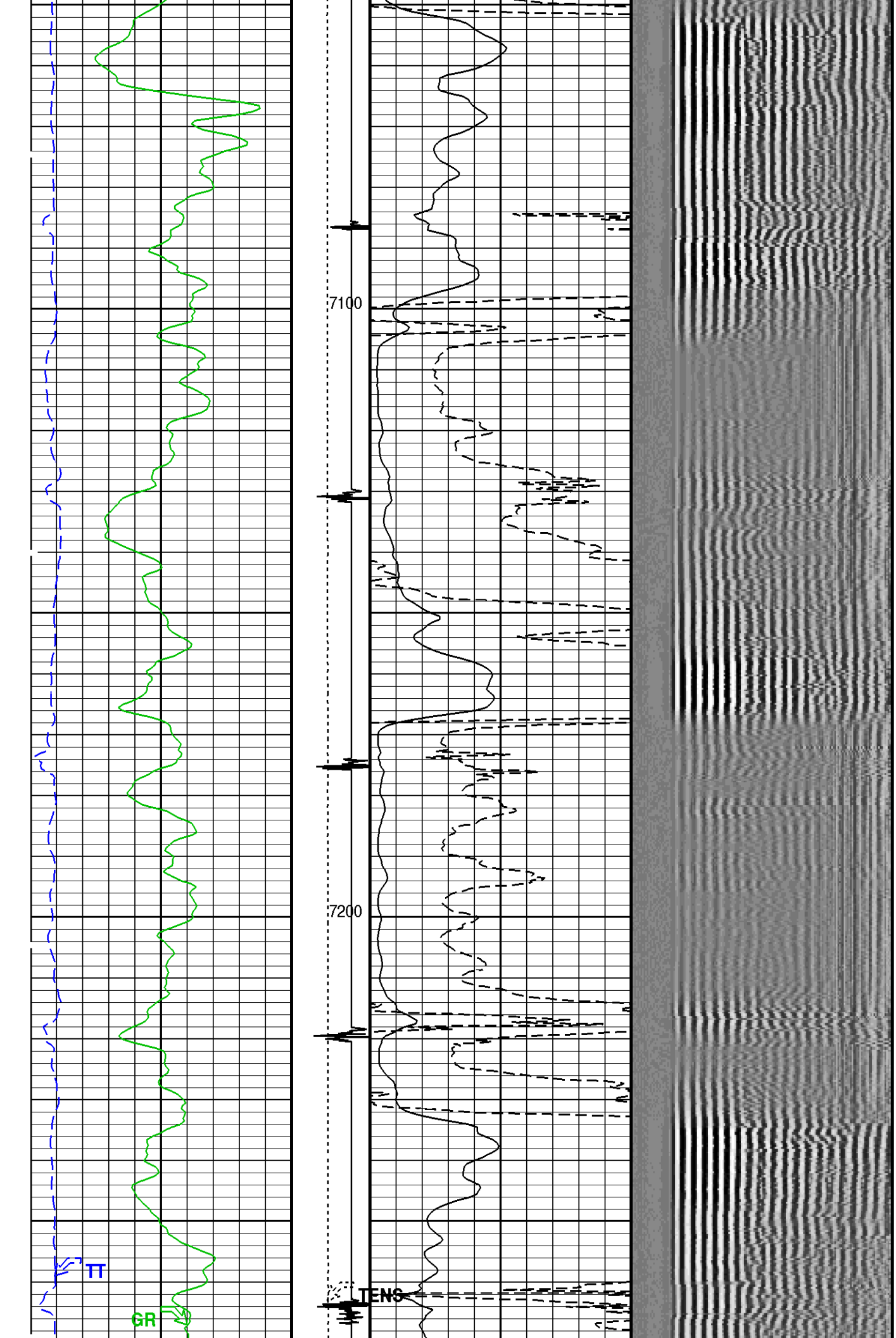
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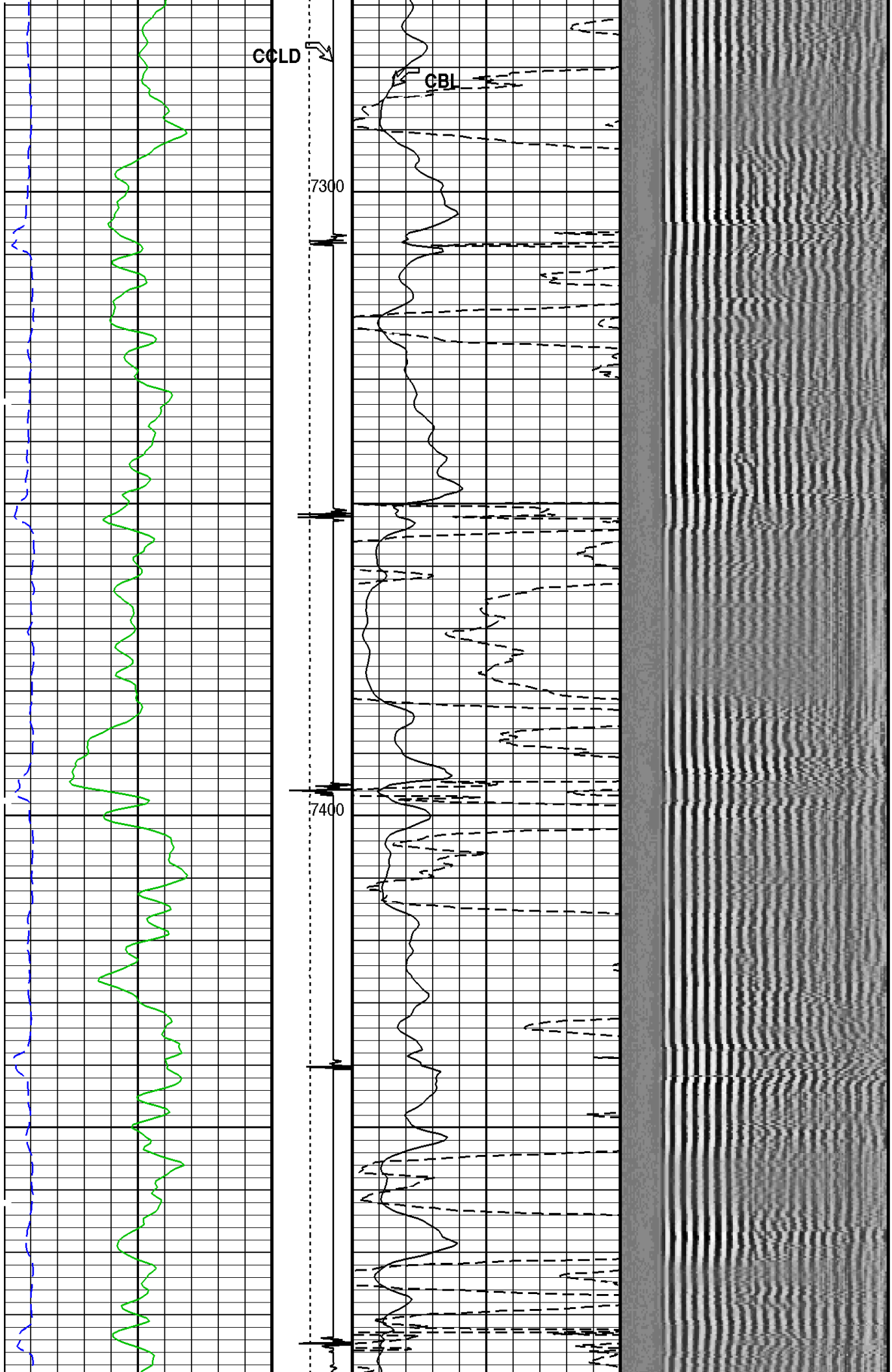
7200
TT
GR
TENS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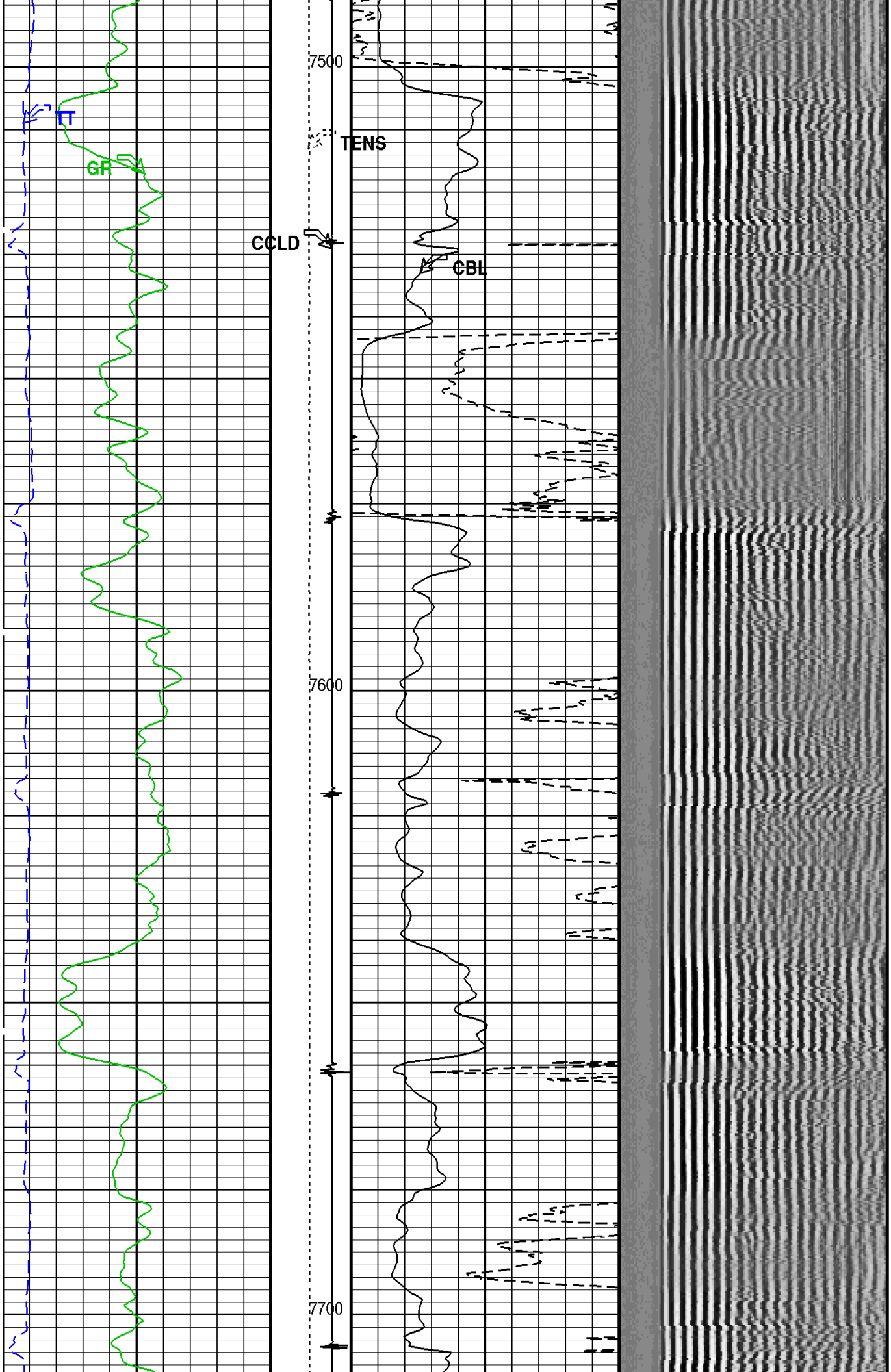
CBL
7300
7400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TENS
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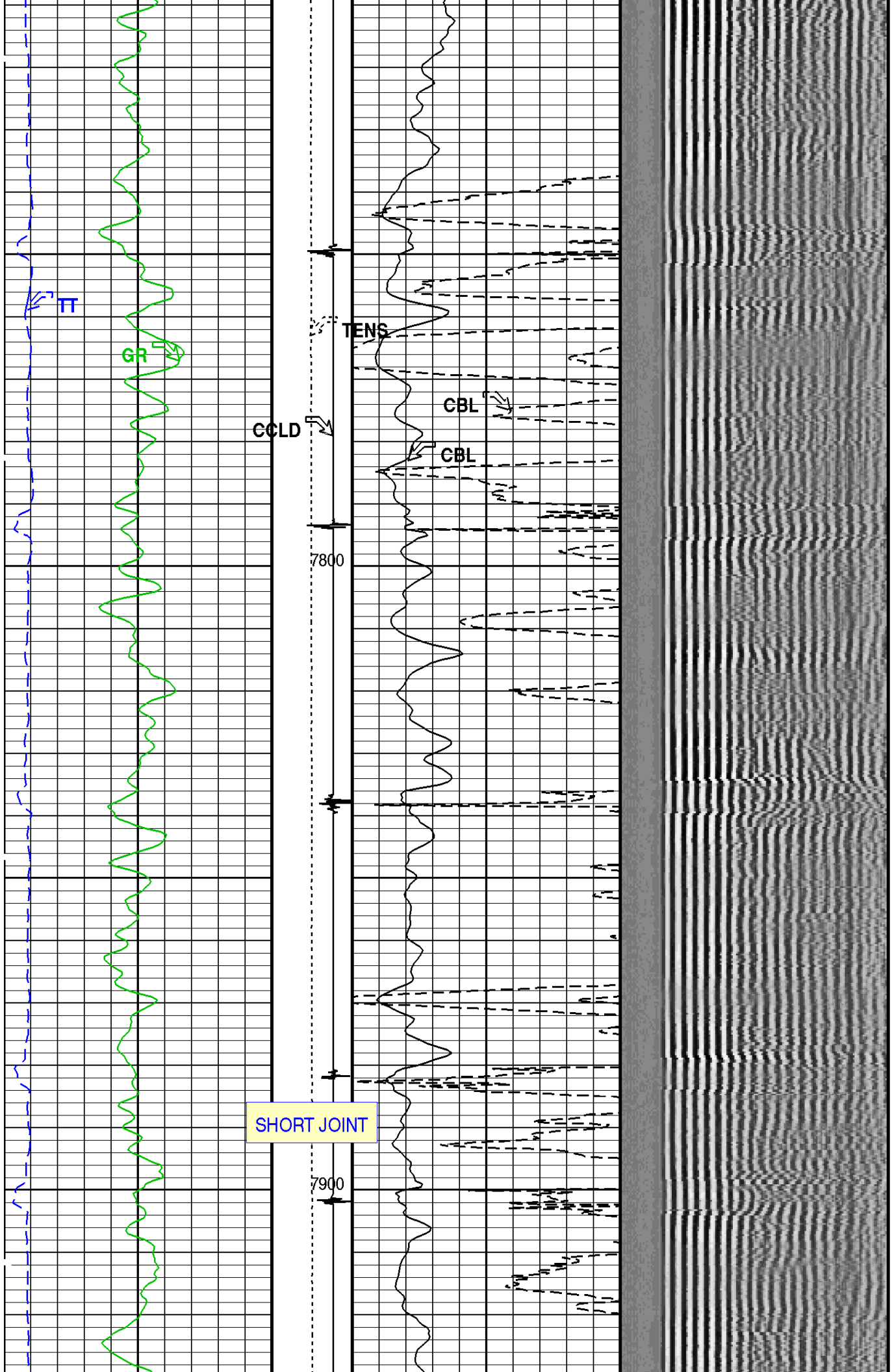
7700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TENS
CBL
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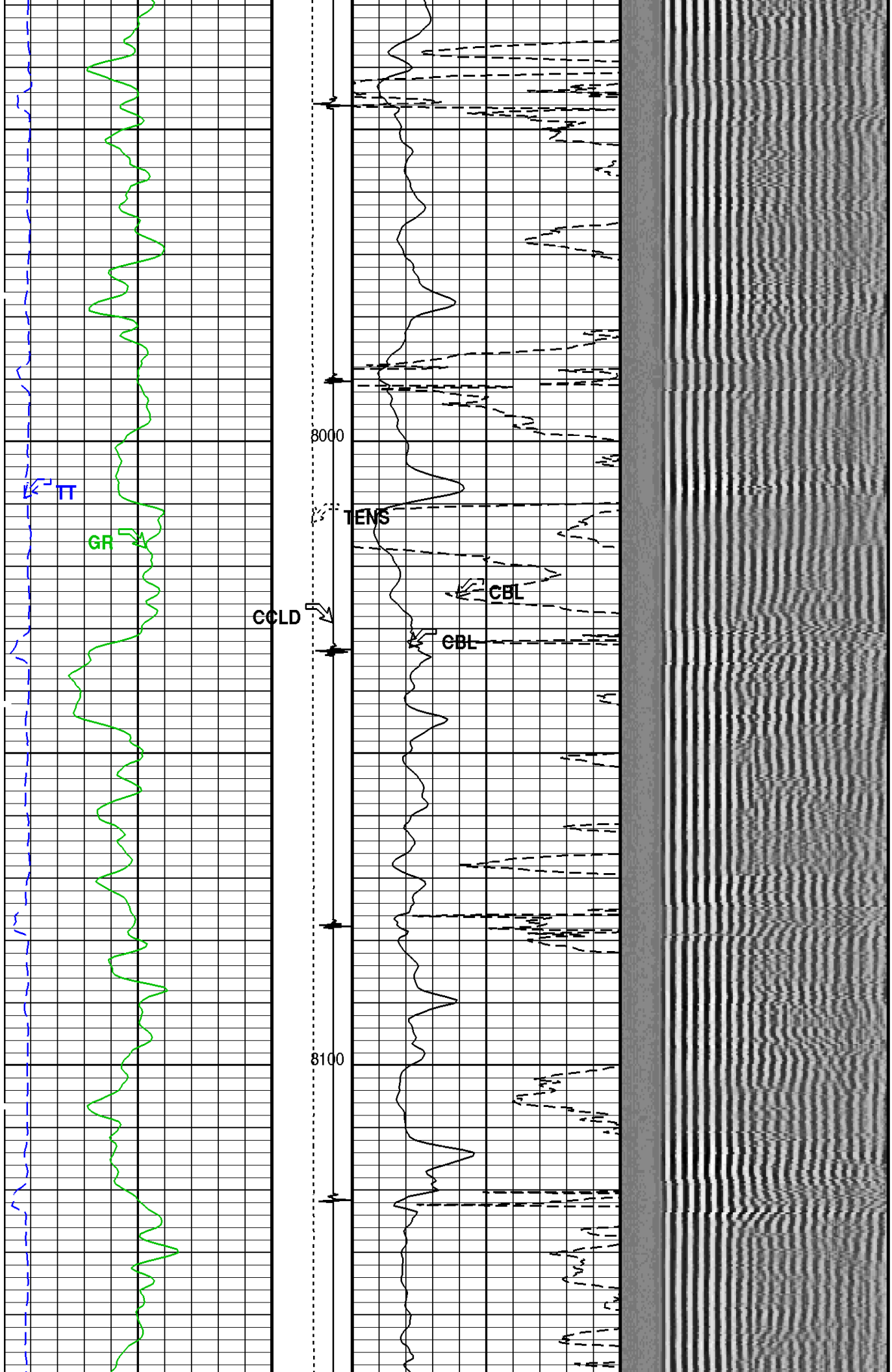
CBL
7800
SHORT JOINT
7900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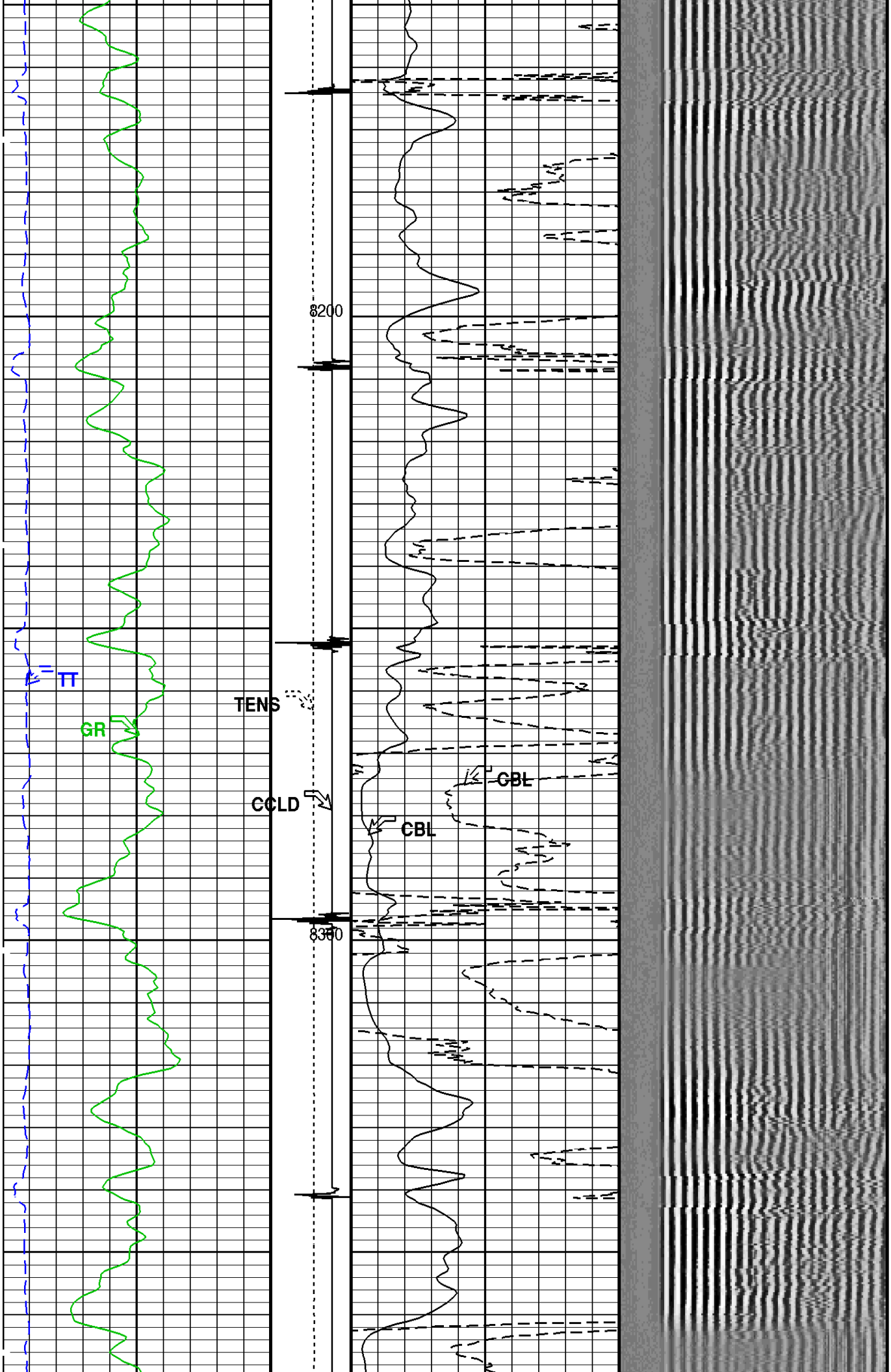
8100
TT
GR
TENS
CBL
CCLD
CBL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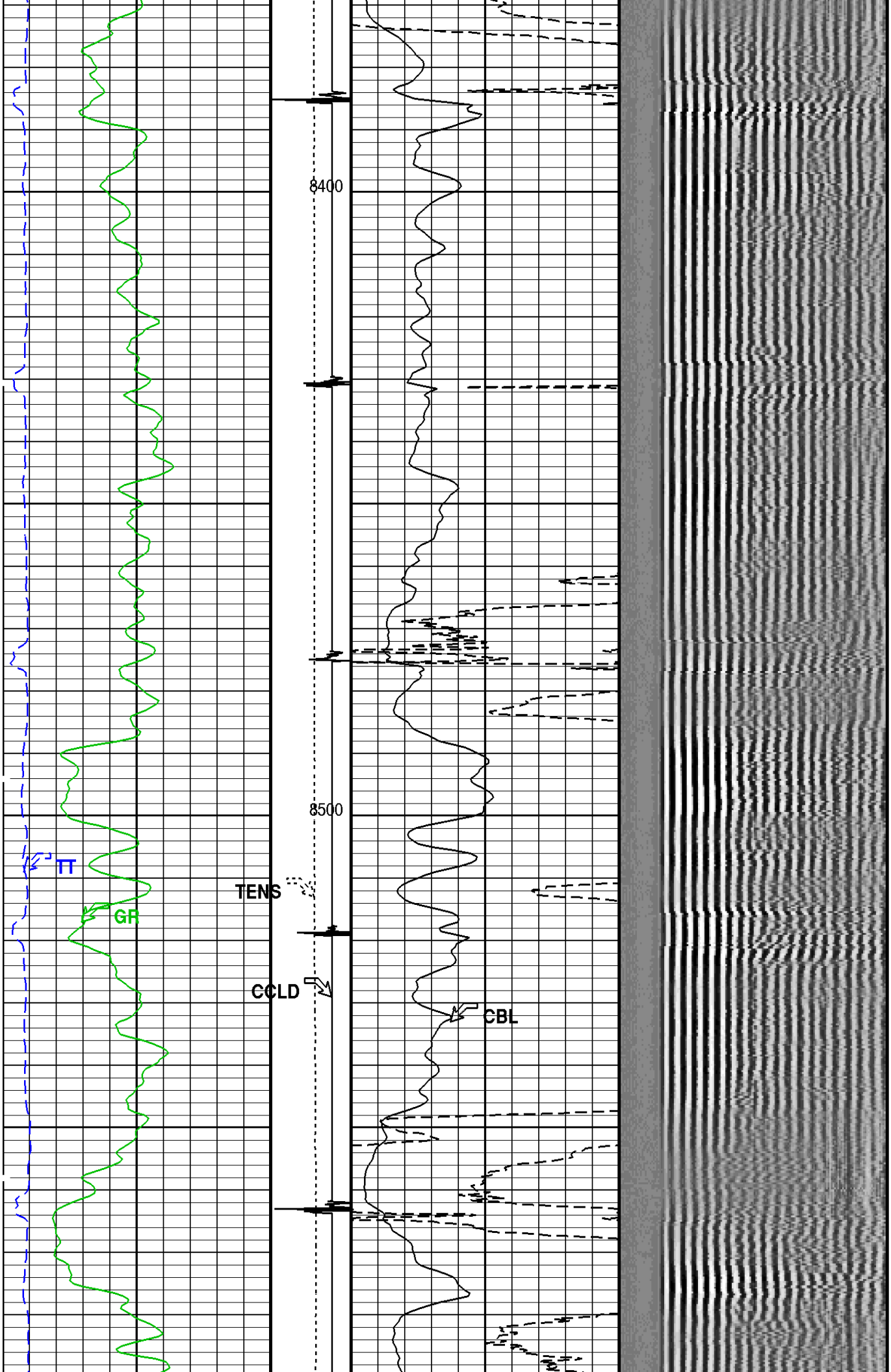
TT
GR
TENS
CCLD
CBL
CBL
8300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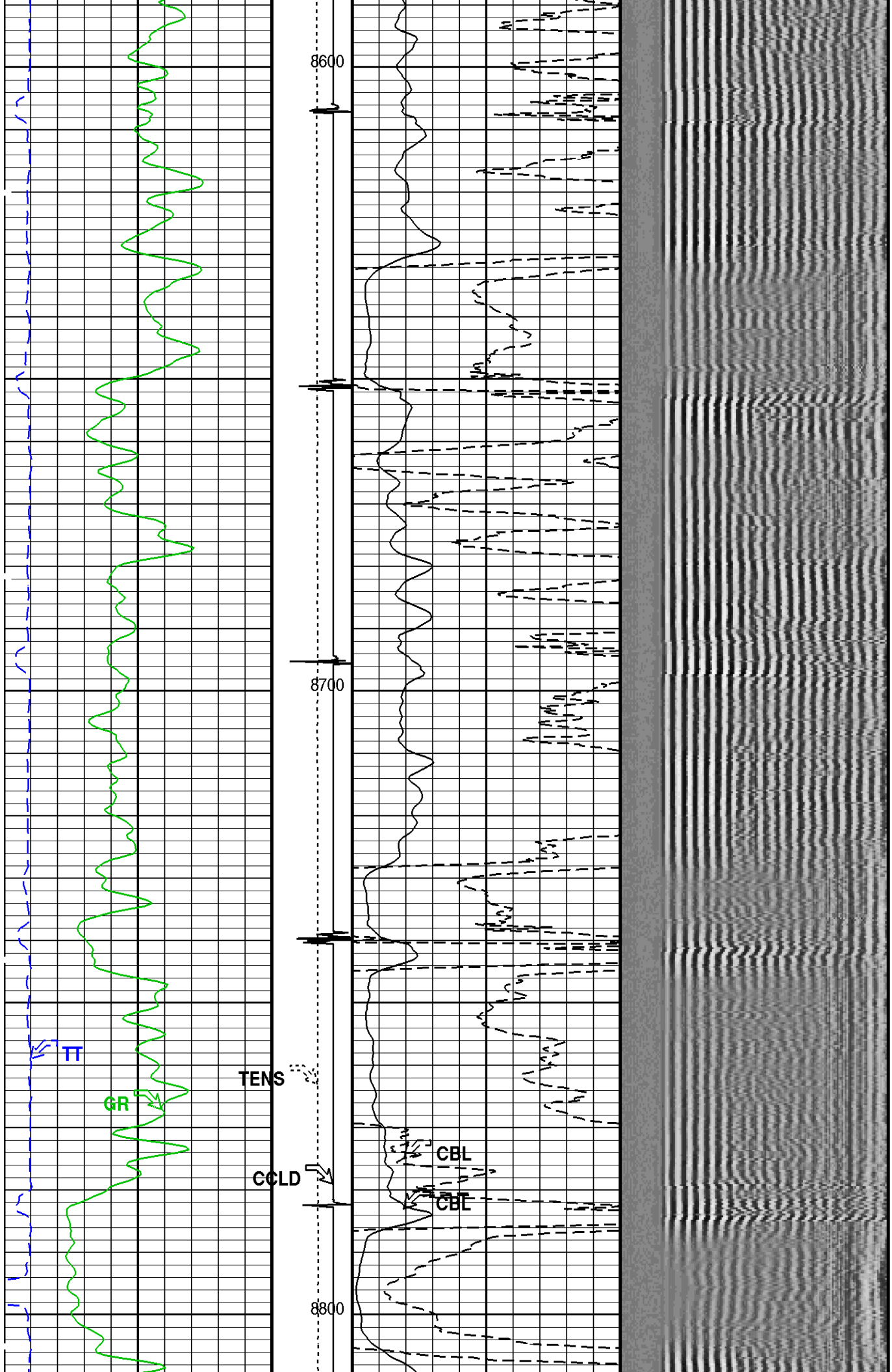
8500
TT
GR
TENS
CCLD
CBL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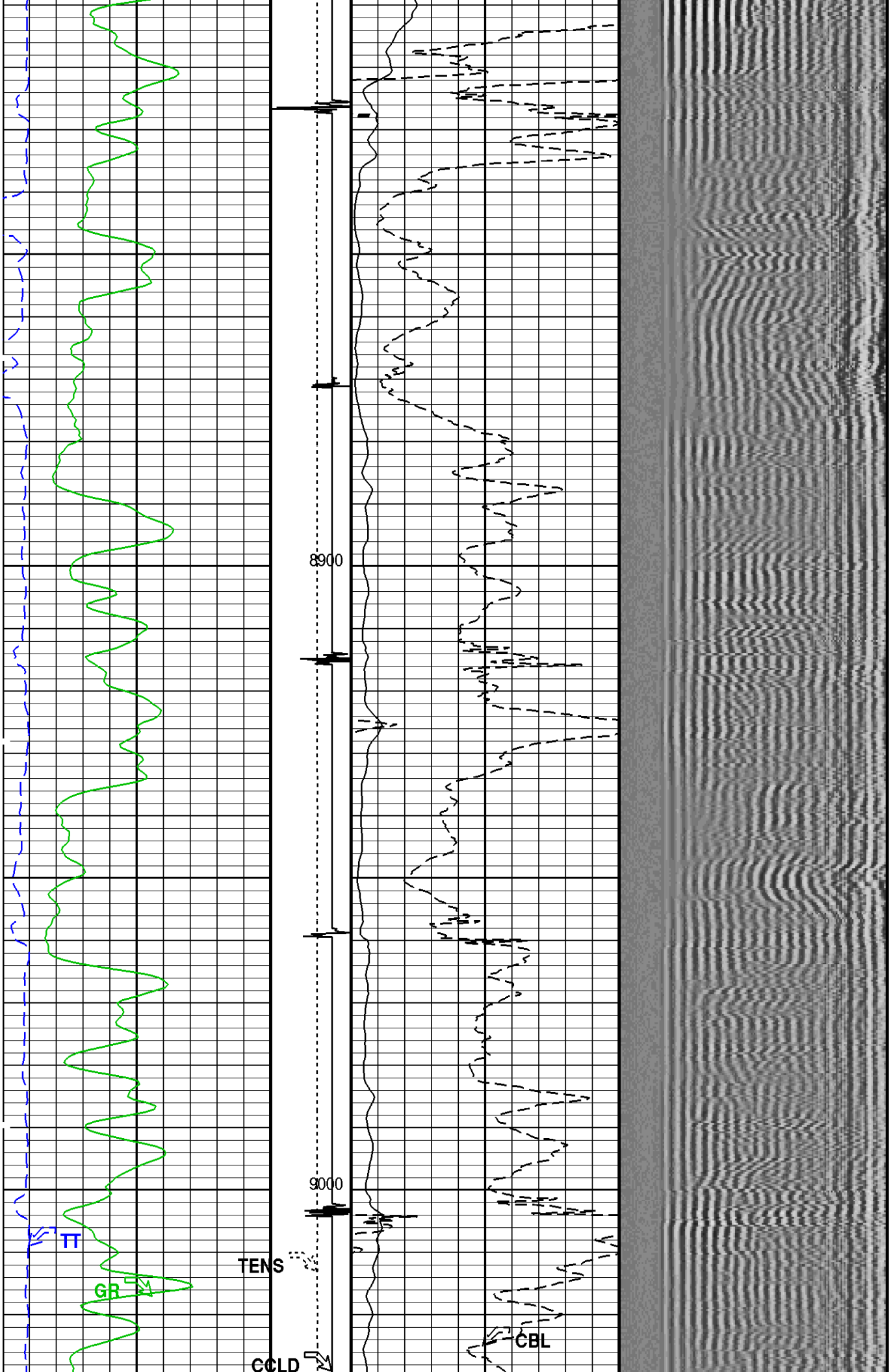
8800
TT
GR
TENS
CCLD
CBL
CBL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9000
TT
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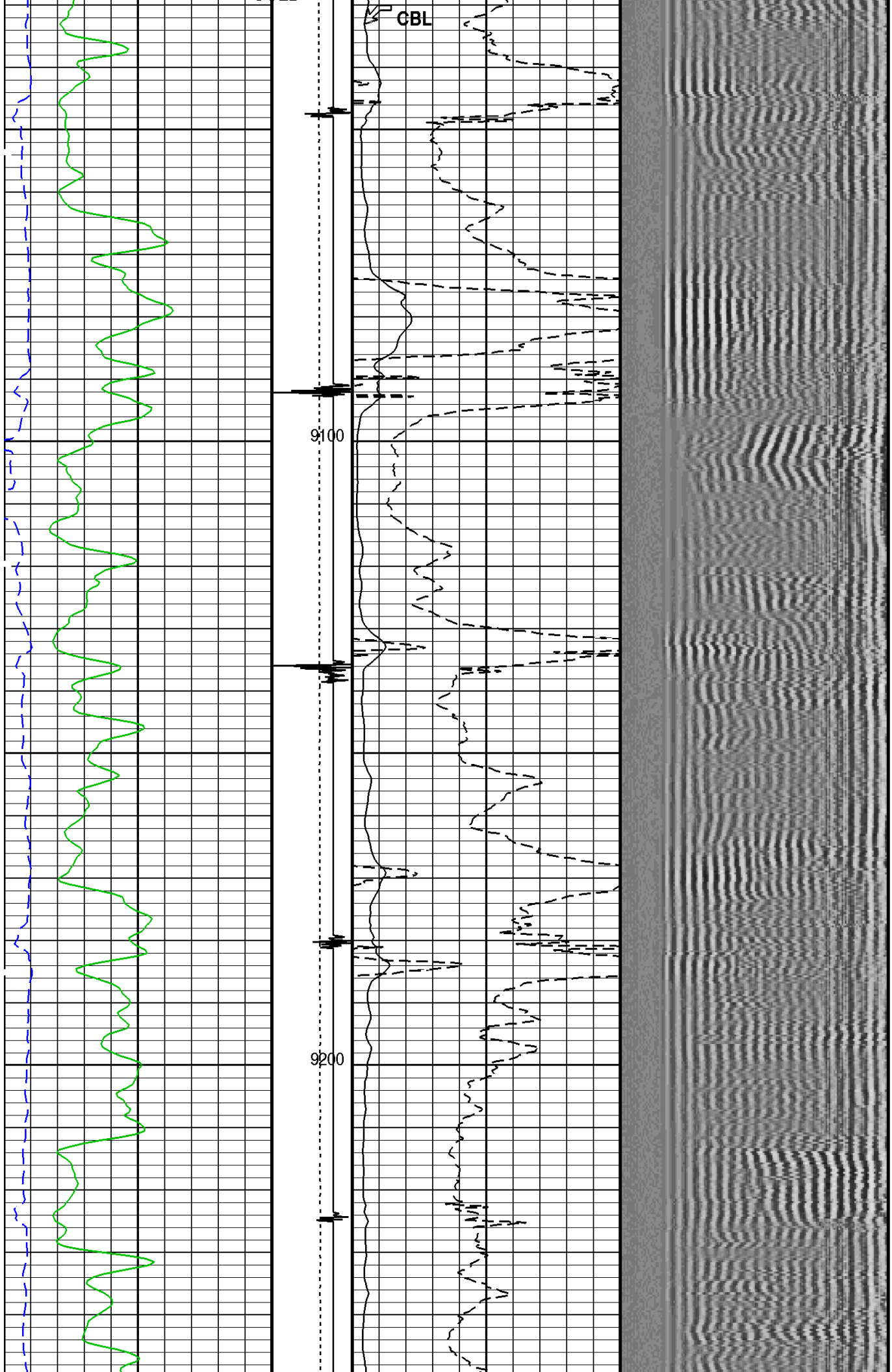
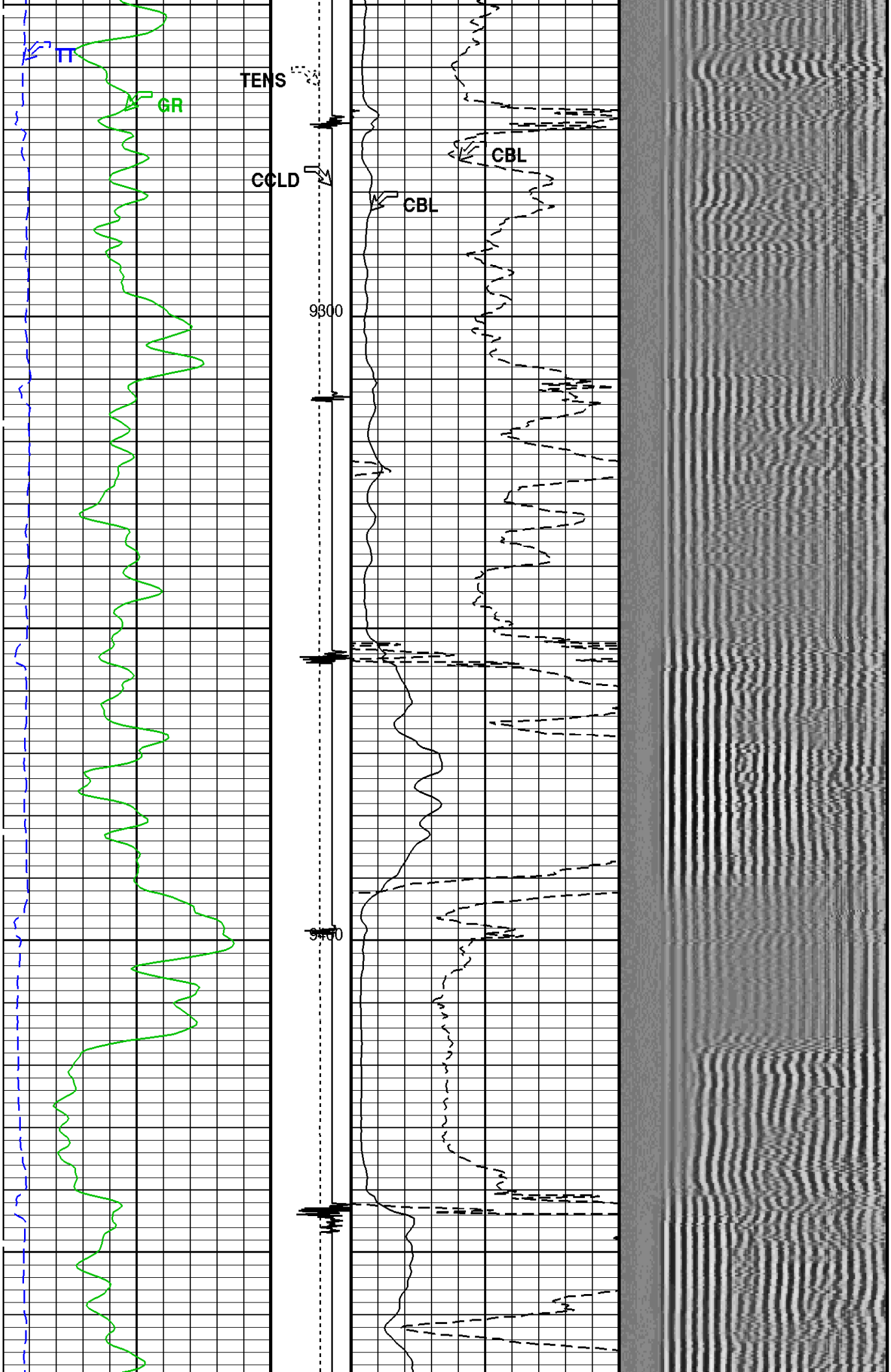
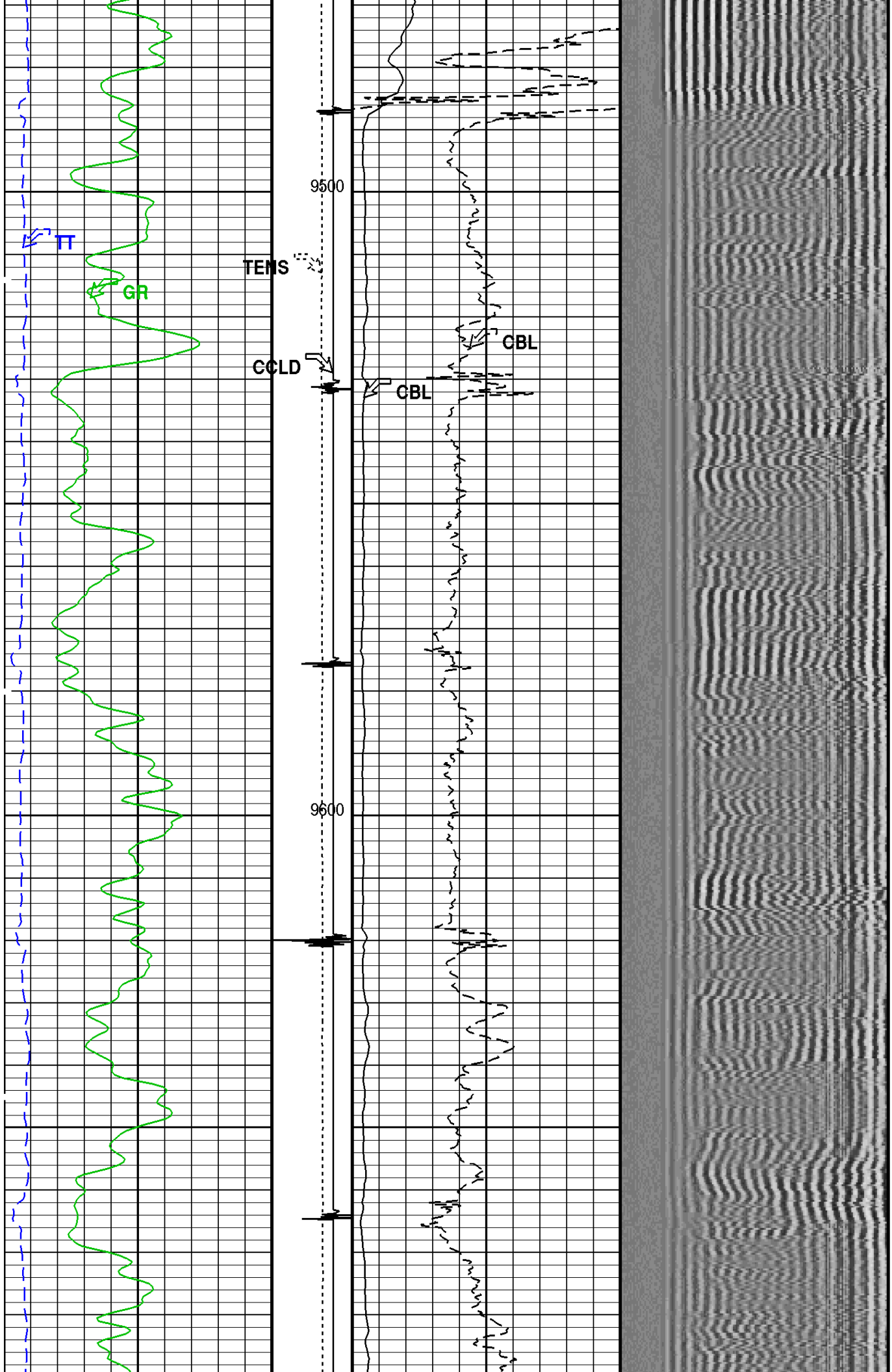
TENS
CCLD
CBL


CBL
9100
9200


TT
GR
TENS
CCLD
CBL
CBL
9300
9400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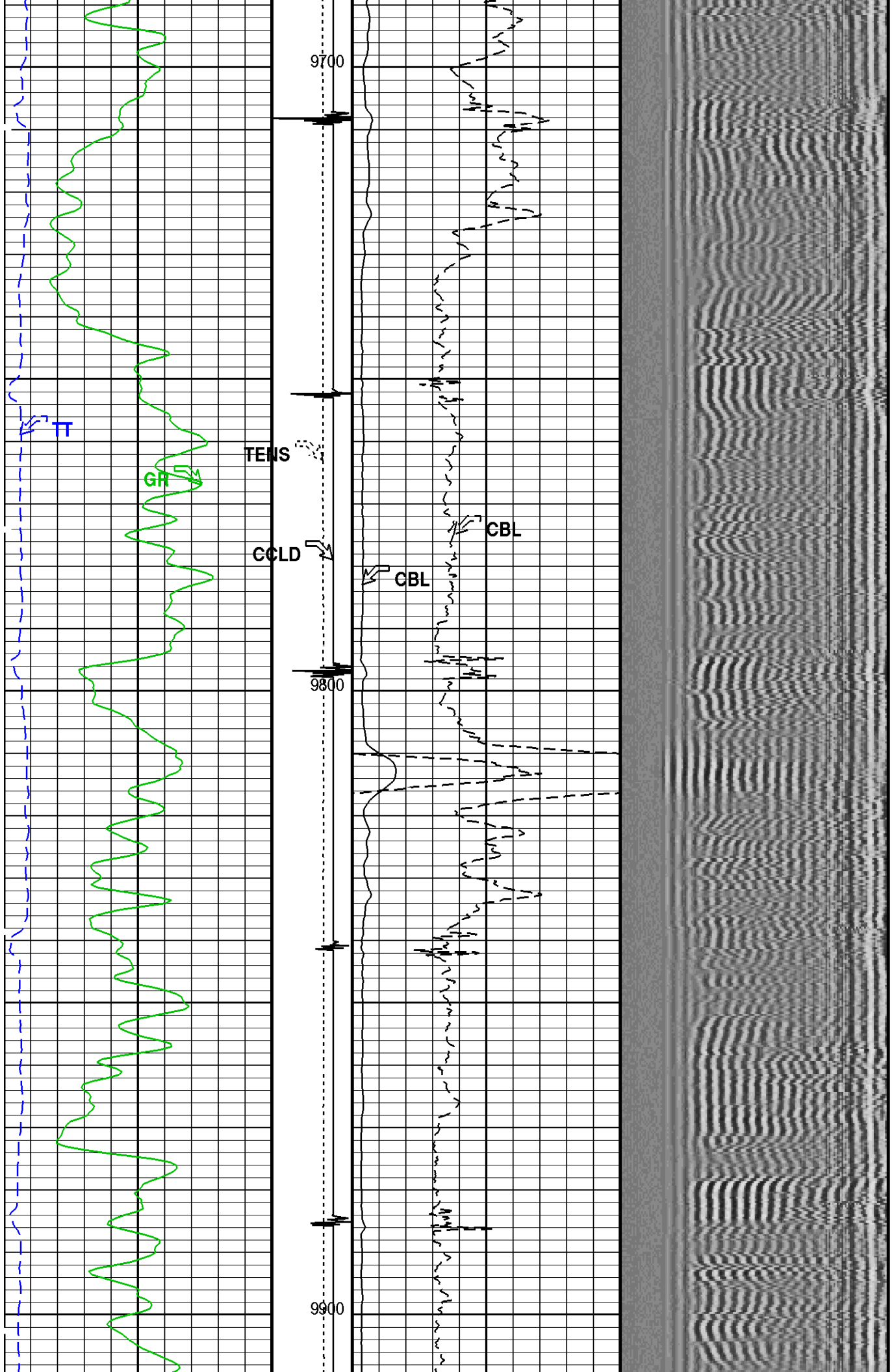
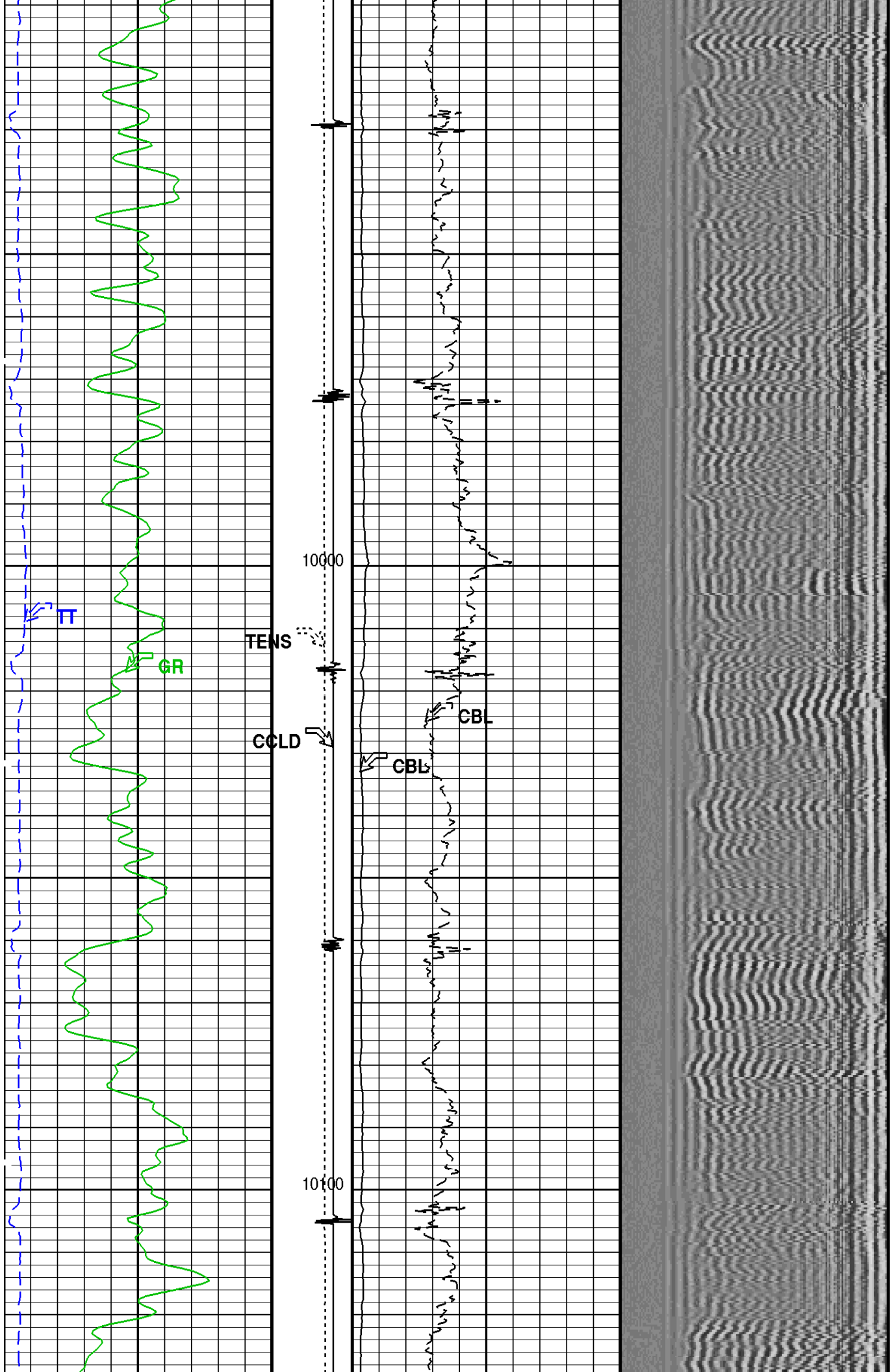
TT
TEMS
GR
CBL
CCLD
CBL
9600


9700
TT
TENS
GR
CBL
CCLD
CBL
9800
9900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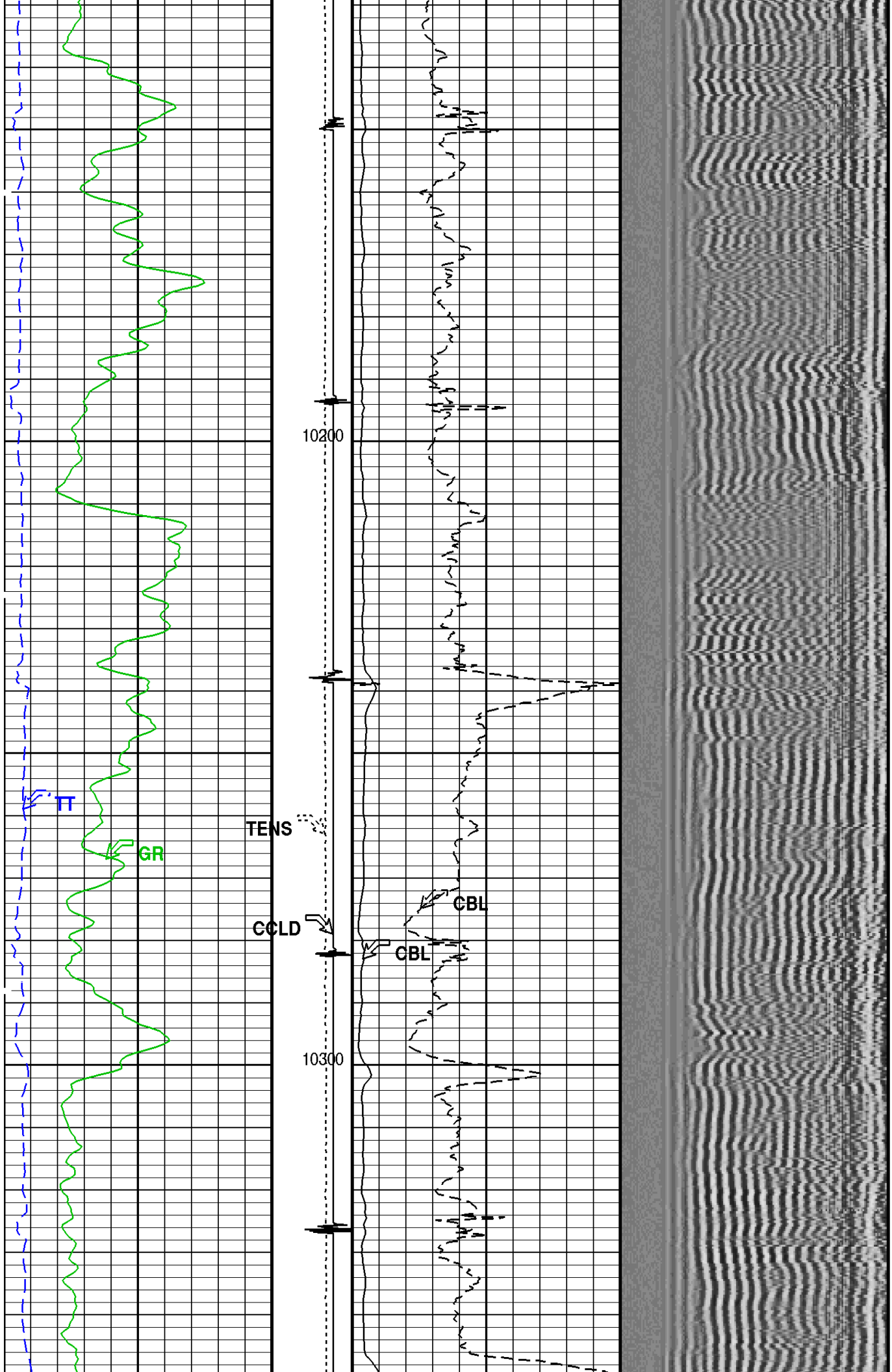
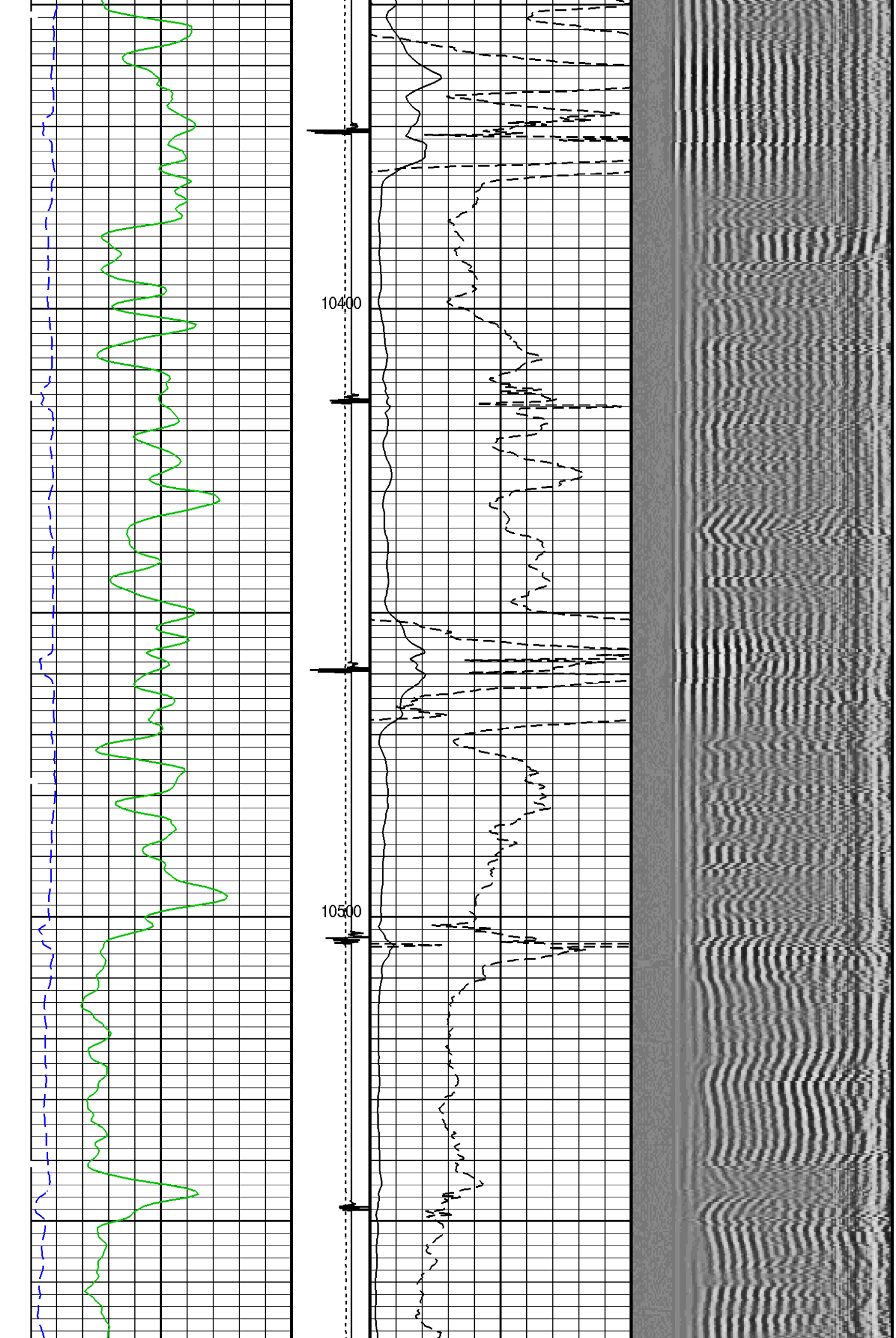
TT
TENS
GR
CBL
CCLD
CBL
10100


10200
TT
GR
TENS
CCLD
CBL
CBL
10300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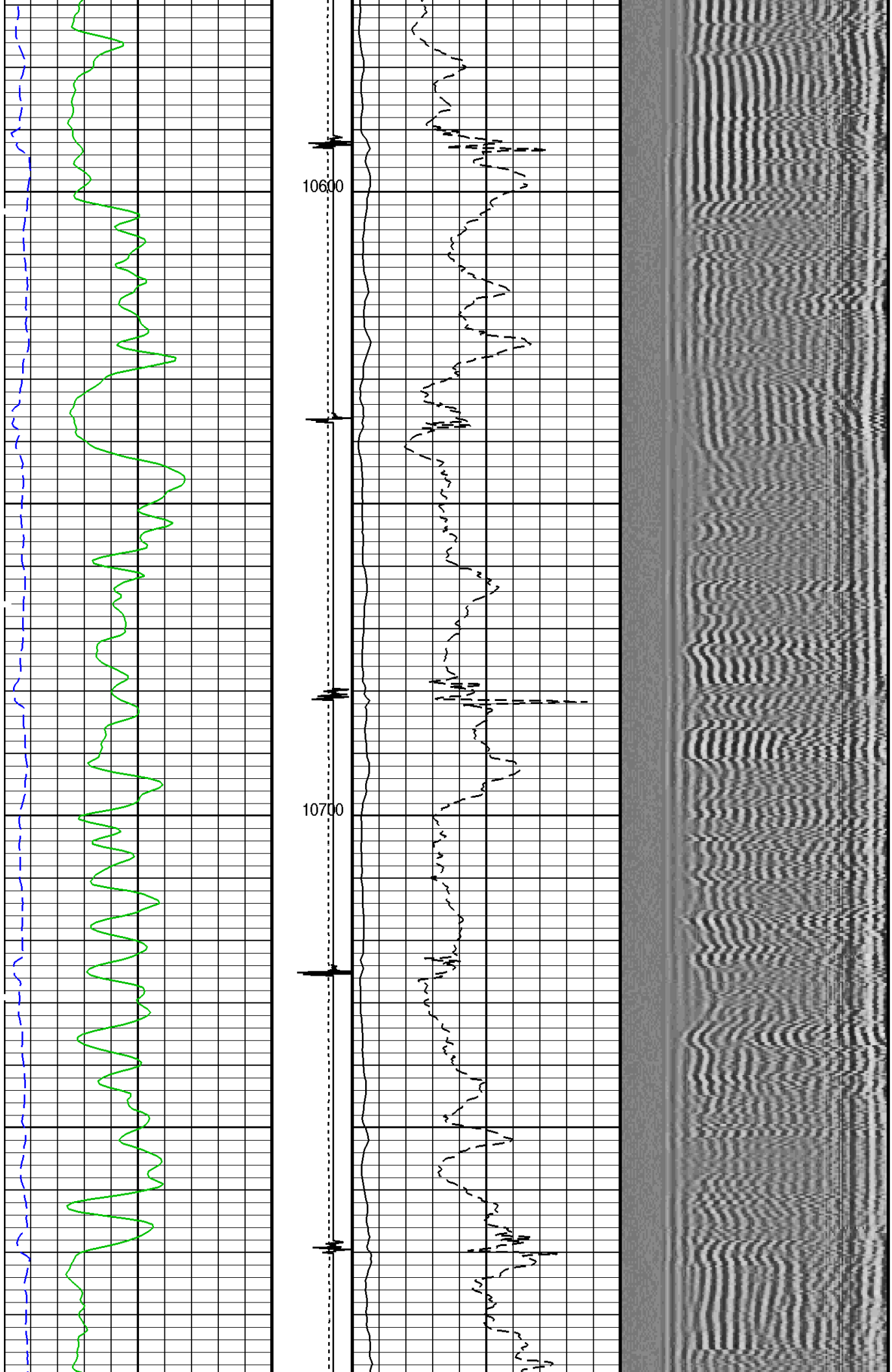
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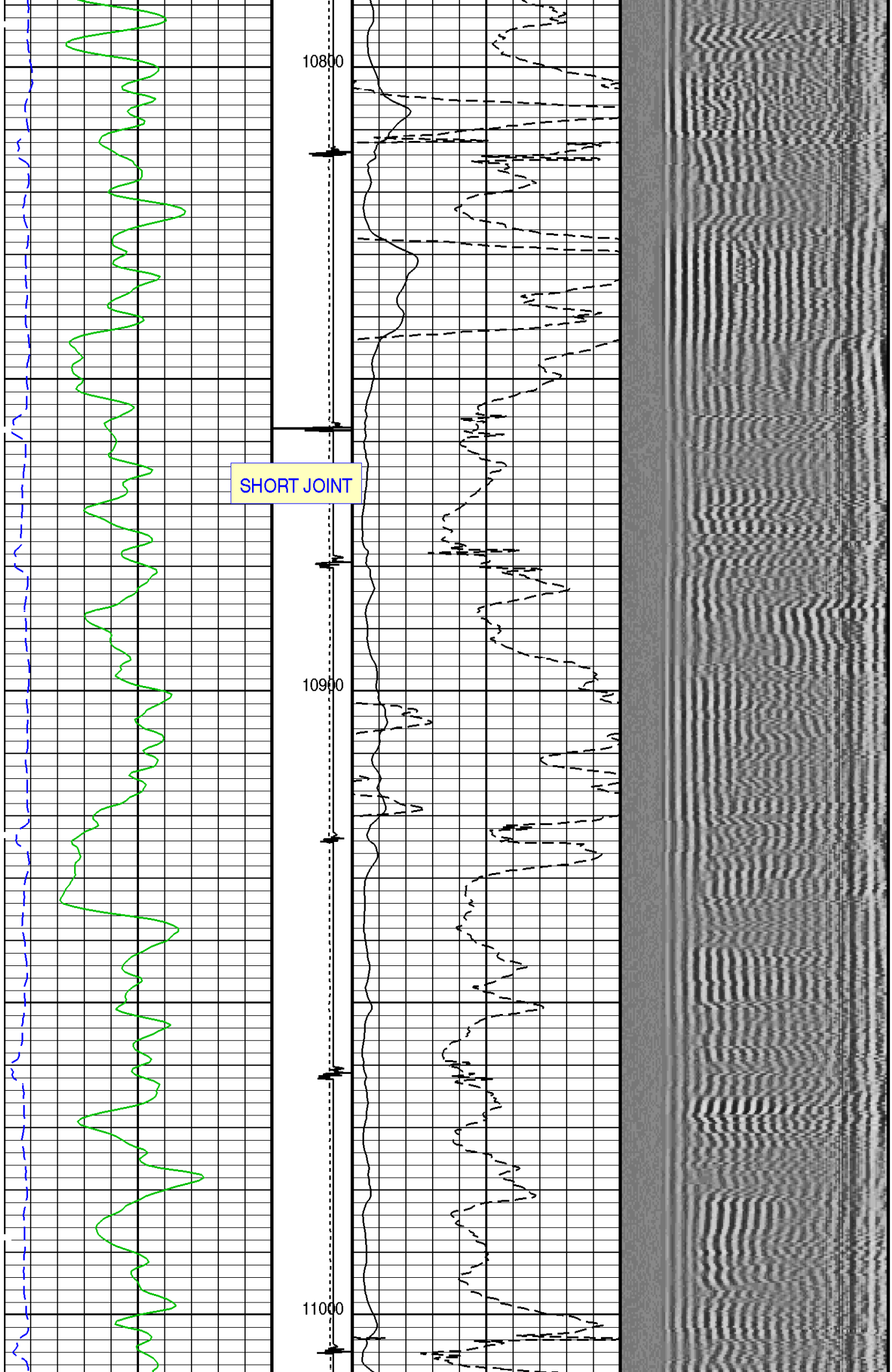
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SHORT JOINT
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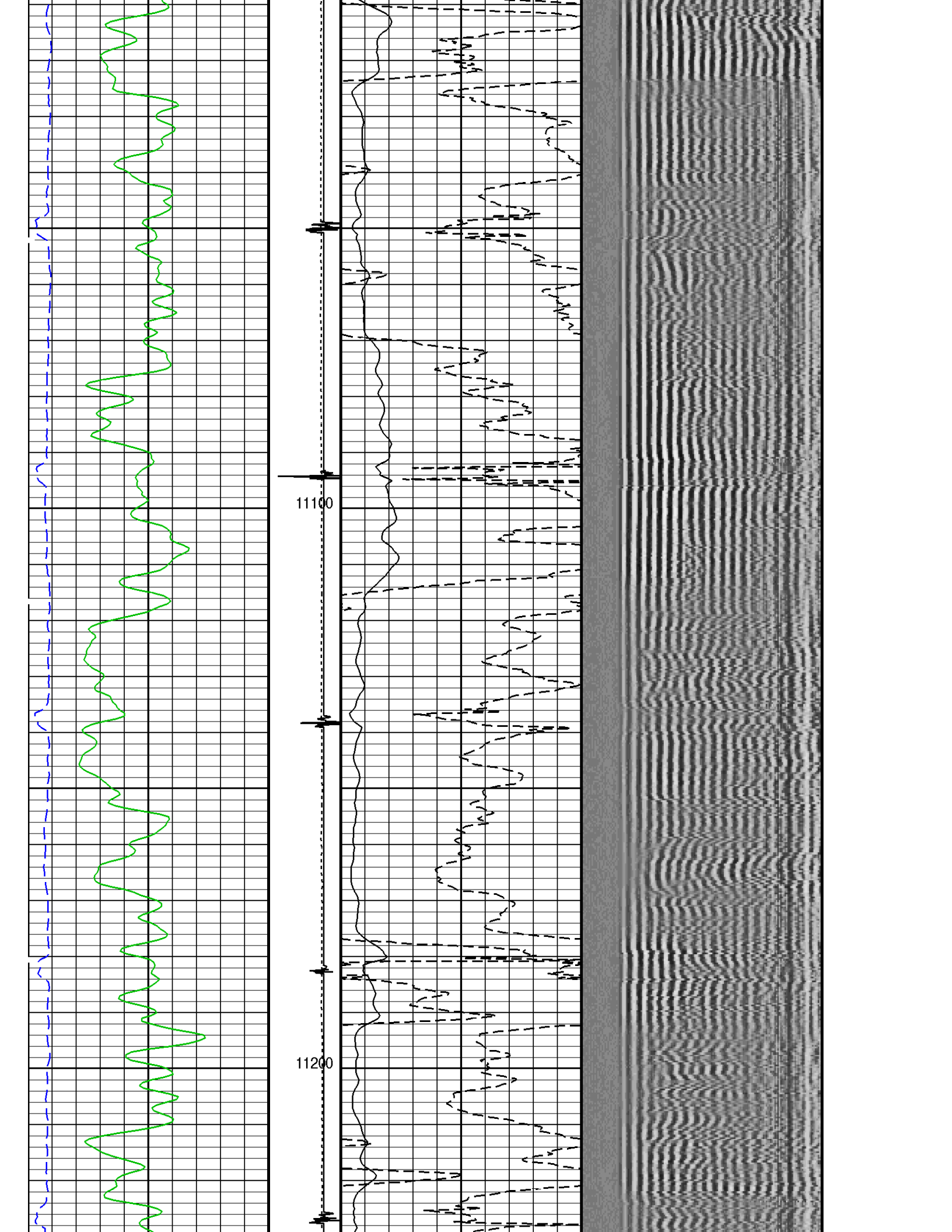
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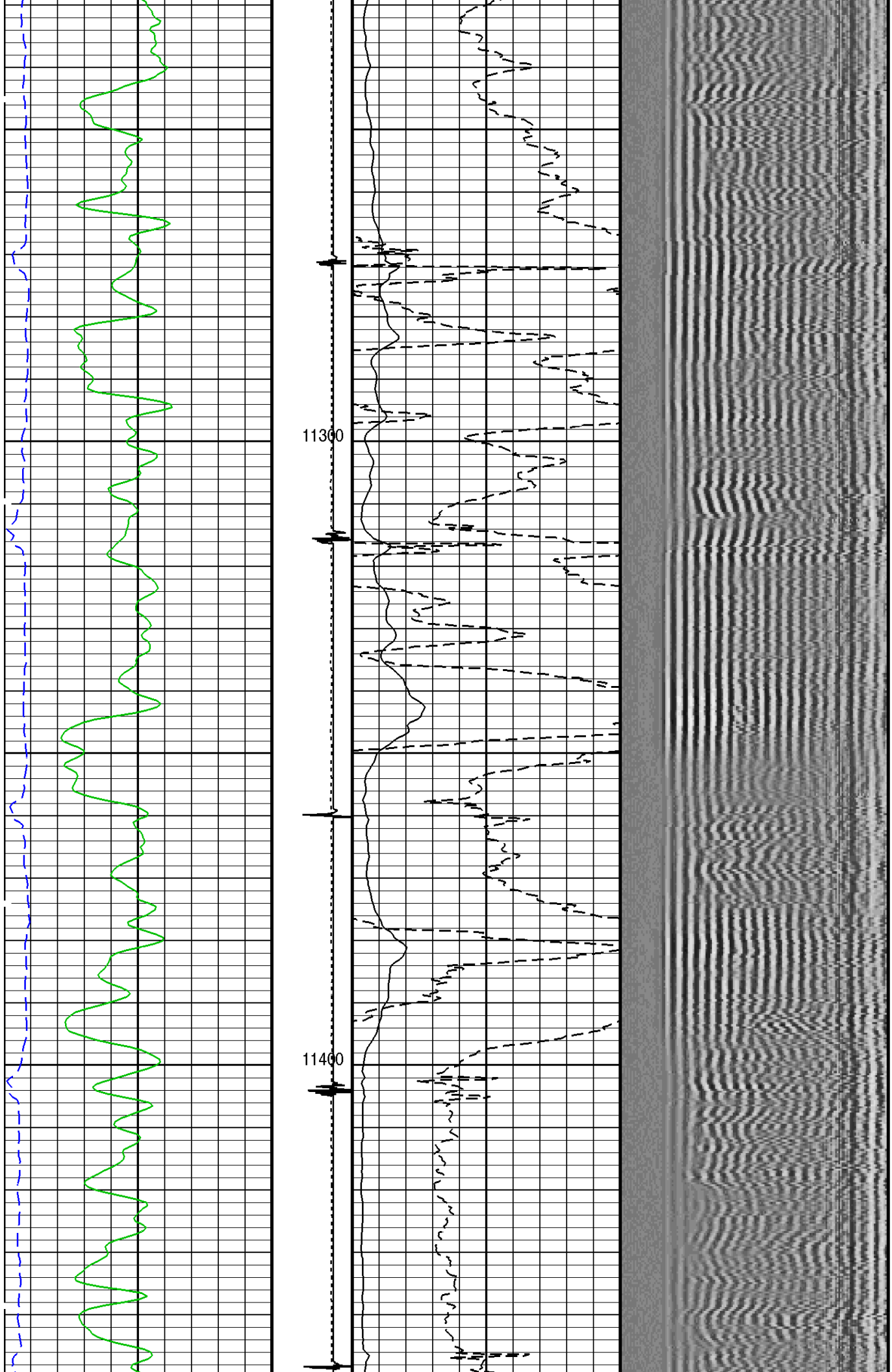
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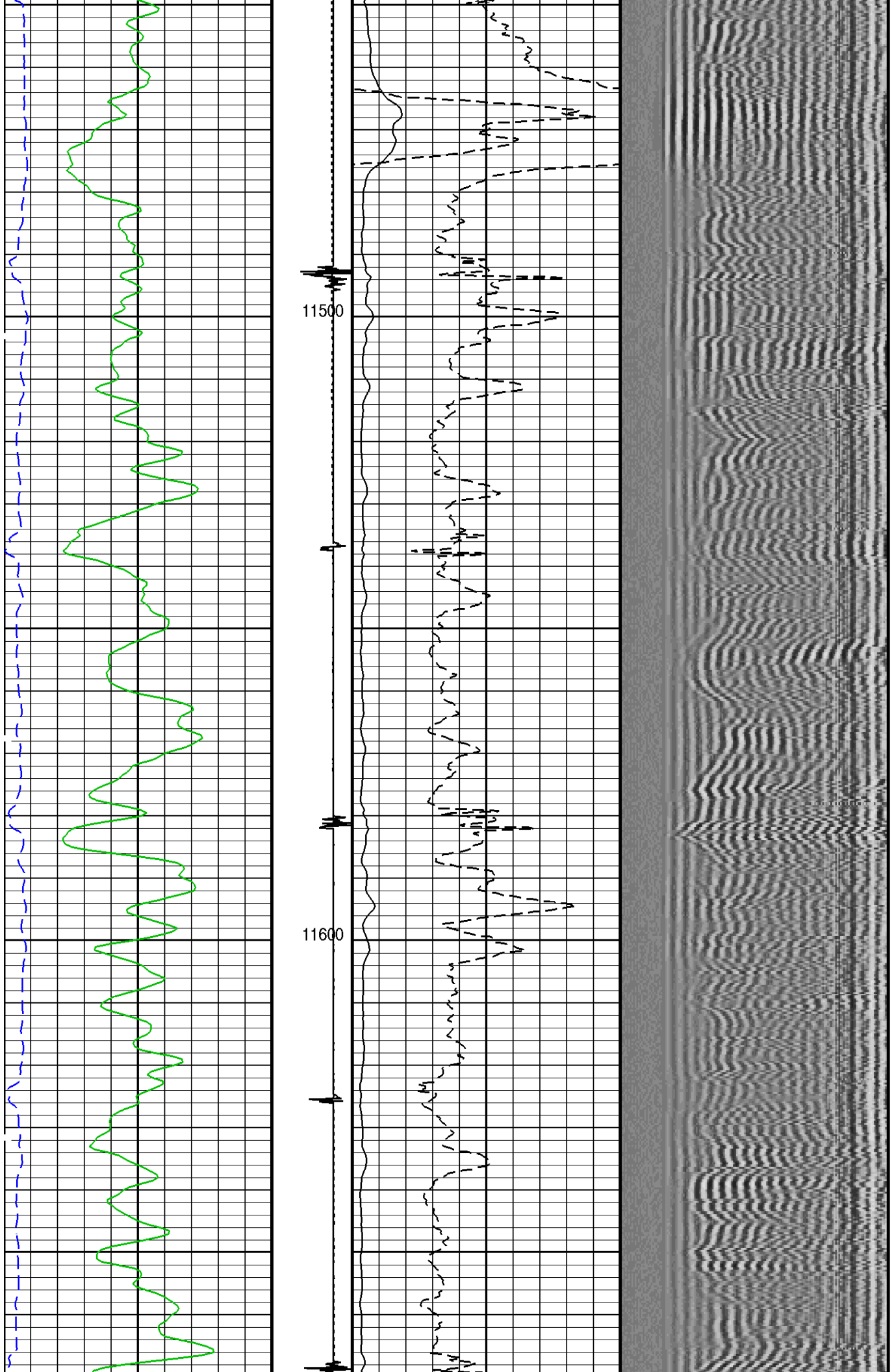
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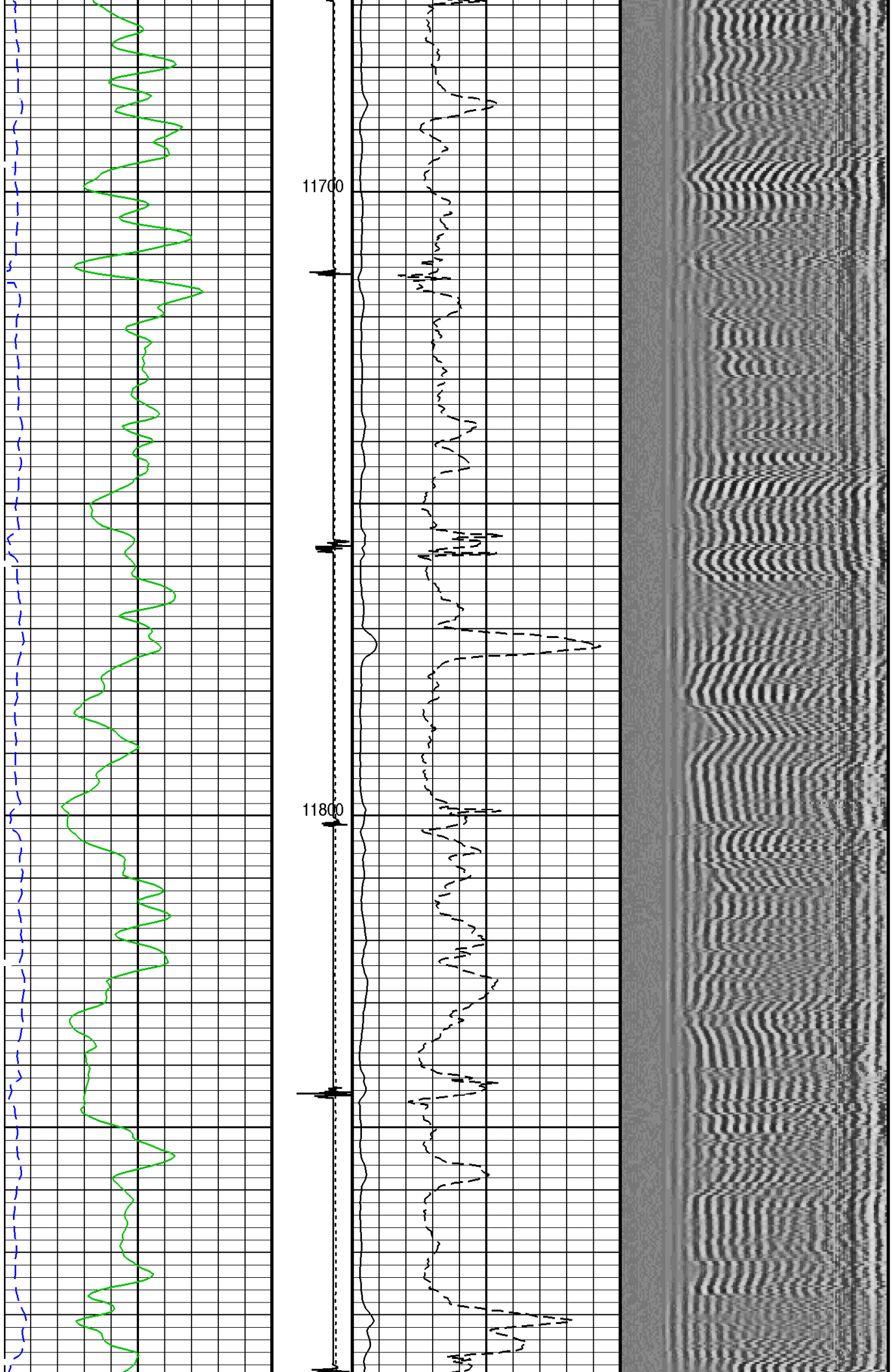
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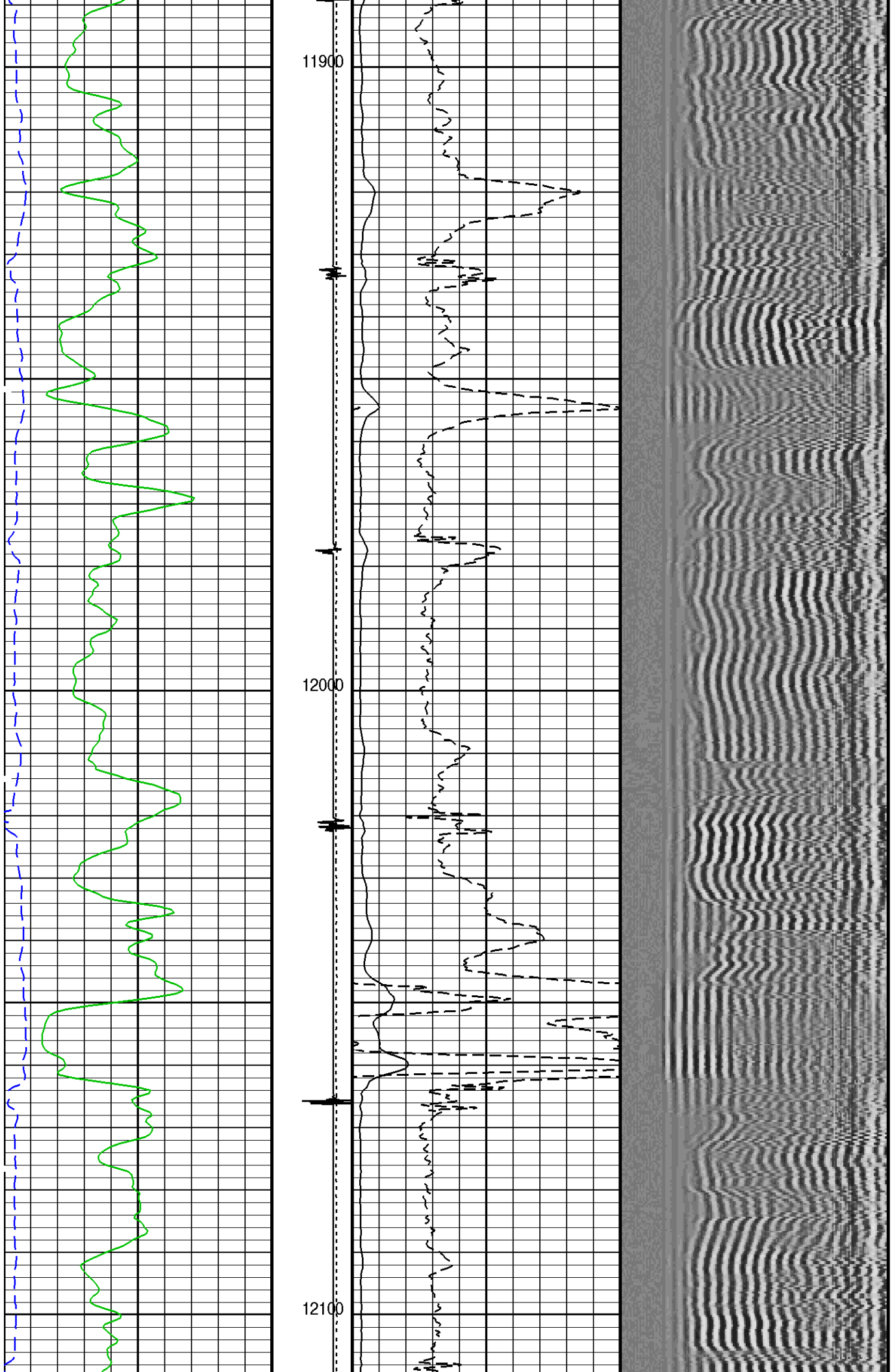
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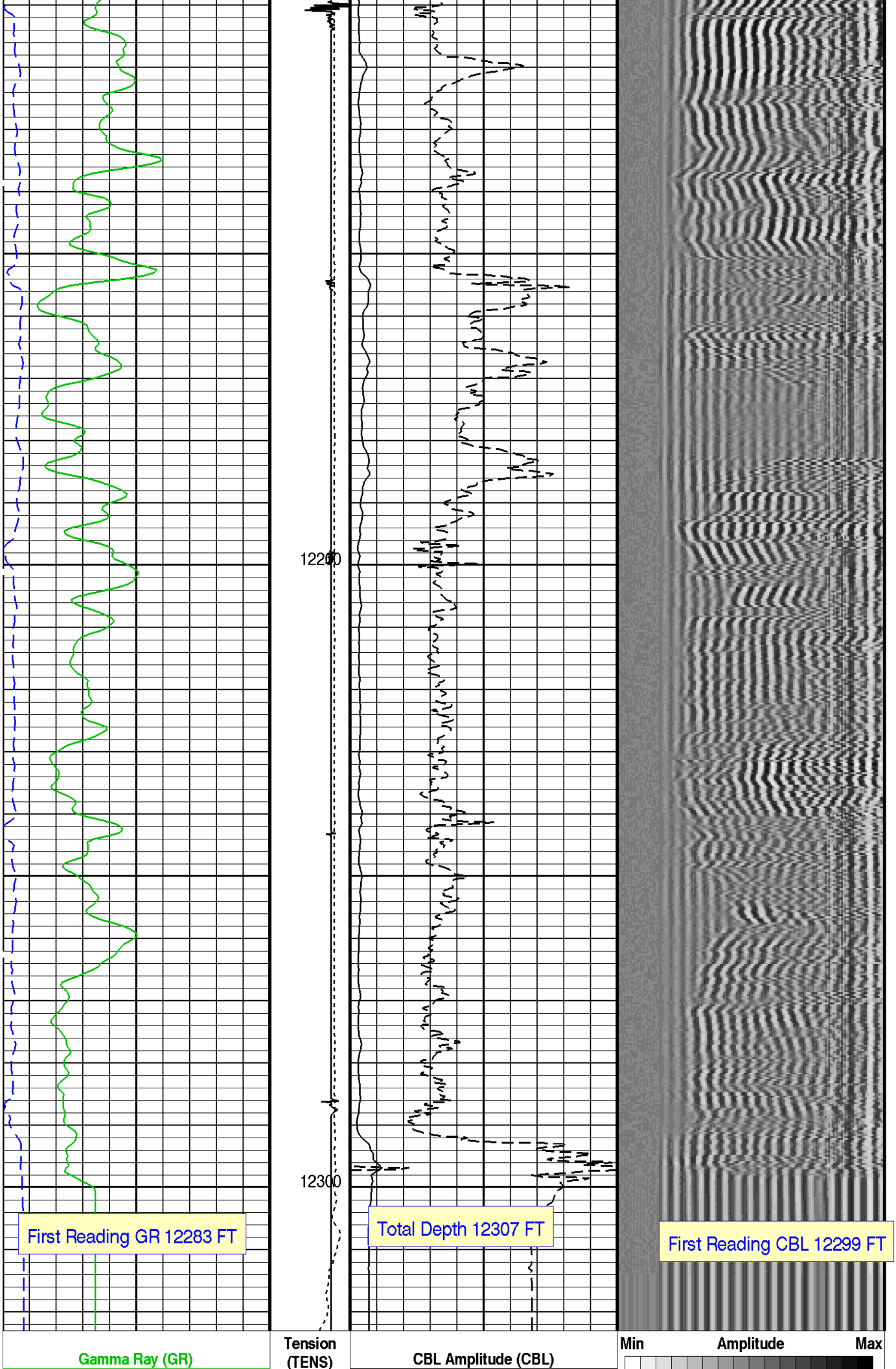
12250
12300
First Reading GR 12283 FT
Total Depth 12307 FT
First Reading CBL 12299 FT
Gamma Ray (GR)
Tension (TENS)
CBL Amplitude (CBL)
Min
Amplitude
Max

0 (GAPI) 150	(LBF) 0 2000	0 (MV) 100
		VDL VariableDensity (VDL) 200 (US) 1200
Transit Time (TT) 260 (US) 160	Discriminated CCL (CCLD) 3 (V) -1	CBL Amplitude (CBL) 0 (MV) 10

PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL Vertical Scale: 5" per 100' Graphics File Created: 12-Jun-2013 18:23

OP System Version: 19C0-187

SCMT-CB SRPC-5214-H2-2012-OP19 PSPT SRPC-5214-H2-2012-OP19

<<<SCMT Cement Evaluation Information Summary>>>

Sonde Serial Number	SCMS-CB 8303		
Current Casing Size	4.50000 IN		
Casing Weight	11.6000 LB/F		
Expected CBL Amplitude in Free Pipe Section	80 MV	Minimum Sonic Amplitude	0.579149 MV (100% Cement) 1.55185 MV (80% Cement)
		MAP Minimum Sonic Amplitude	4.32284 MV (100% Cement) 8.10244 MV (80% Cement)
Master Calibration (Normalization)		Before Calibration (Adjustment)	
Date of Master Calibration	7-SEP-2012		
CBL Correction Factor	0.0756720	CBL Adjustment Factor (CBAF)	0.700000
MAP 1 Correction Factor	0.136845	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.165126		
MAP 3 Correction Factor	0.125717		
MAP 4 Correction Factor	0.196395		
MAP 5 Correction Factor	0.147692		
MAP 6 Correction Factor	0.128887		
MAP 7 Correction Factor	0.150775		
MAP 8 Correction Factor	0.144577		

Parameters

DLIS Name	Description	Value	
	SCMT-CB: Slim Cement Mapping Tool, 1-11/16 OD		
BILI	Bond Index Level for Zone Isolation	0.8	
CB3D	SCMT CBL 3 ft Peak Detection Mode	PEAK	
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	224.559	US
CB3T	SCMT CBL 3 ft Fixed Threshold Level	20	MV
CB5D	SCMT CBL 5 ft Peak Detection Mode	PEAK	
CB5G	SCMT CBL 5 ft Peak Detection T0_Delay and Noise Gate	338.559	US
CB5T	SCMT CBL 5 ft Fixed Threshold Level	20	MV
CBLG	CBL Gate Width	45	US
CBRA	CBL LQC Reference Amplitude in Free Pipe	80	MV
CMCF	CBL Cement Type Compensation Factor	1	
CMTC	SCMT Slow Channel Multiplexer Mode	SCAN	
CMTM	SCMT Operating Mode	LOG	
CSCS	SCMT Slow Channel Index	VCC	
CTHI	Casing Thickness	0.255617	IN
DTF	Delta-T Fluid	189	US/F
FATT	Acoustic Attenuation due to Fluid	0	DB/F
FCF	CBL Fluid Compensation Factor	0.924277	
GOBO	Good Bond	1.55185	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	167.559	US
MAPT	SCMT MAP Fixed Threshold Level	30	MV
MATT	Maximum Attenuation	16.5449	DB/F
MCCF	MAP Cement Type Compensation Factor	1	
MCI	Minimum Cemented Interval for Isolation	1.25	FT

MMSA	MAP Minimum Sonic Amplitude	4.32284	MV
MSA	Minimum Sonic Amplitude	0.579149	MV
PEDE	Peak Detection On/Off Switch in Playback	OFF	
VDLG	VDL Manual Gain	5	
ZCMT	Acoustic Impedance of Cement	6.8	MRAY
System and Miscellaneous			
CWEI	Casing Weight	11.60	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	7.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	12307	FT

Input DLIS Files

DEFAULT	SCMT_PSP_018LUP	FN:17	PRODUCER	12-Jun-2013 15:10	12316.0 FT	20.5 FT

Output DLIS Files

DEFAULT	SCMT_PSP_020PUP	FN:19	PRODUCER	12-Jun-2013 18:23		

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REPEAT ANALYSIS CBL VDL

MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC

Well: SG 8512C-36 (D36 496)

Input DLIS Files

DEFAULT	SCMT_PSP_016LUP	FN:15	PRODUCER	12-Jun-2013 14:52	8014.5 FT	7768.0 FT
DEFAULT	SCMT_PSP_020PUP	FN:19	PRODUCER	12-Jun-2013 18:23	12323.0 FT	6.0 FT

Output DLIS Files

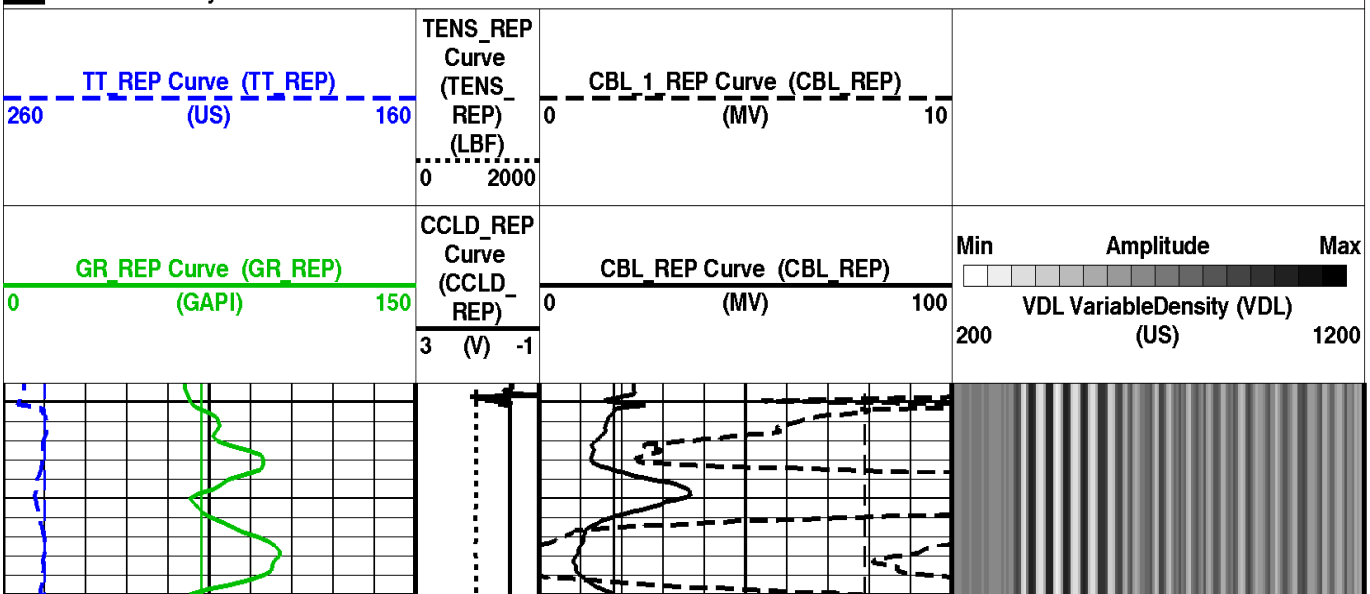
DEFAULT	SCMT_PSP_021PUP	FN:20	PRODUCER	12-Jun-2013 18:30	8015.5 FT	7747.5 FT

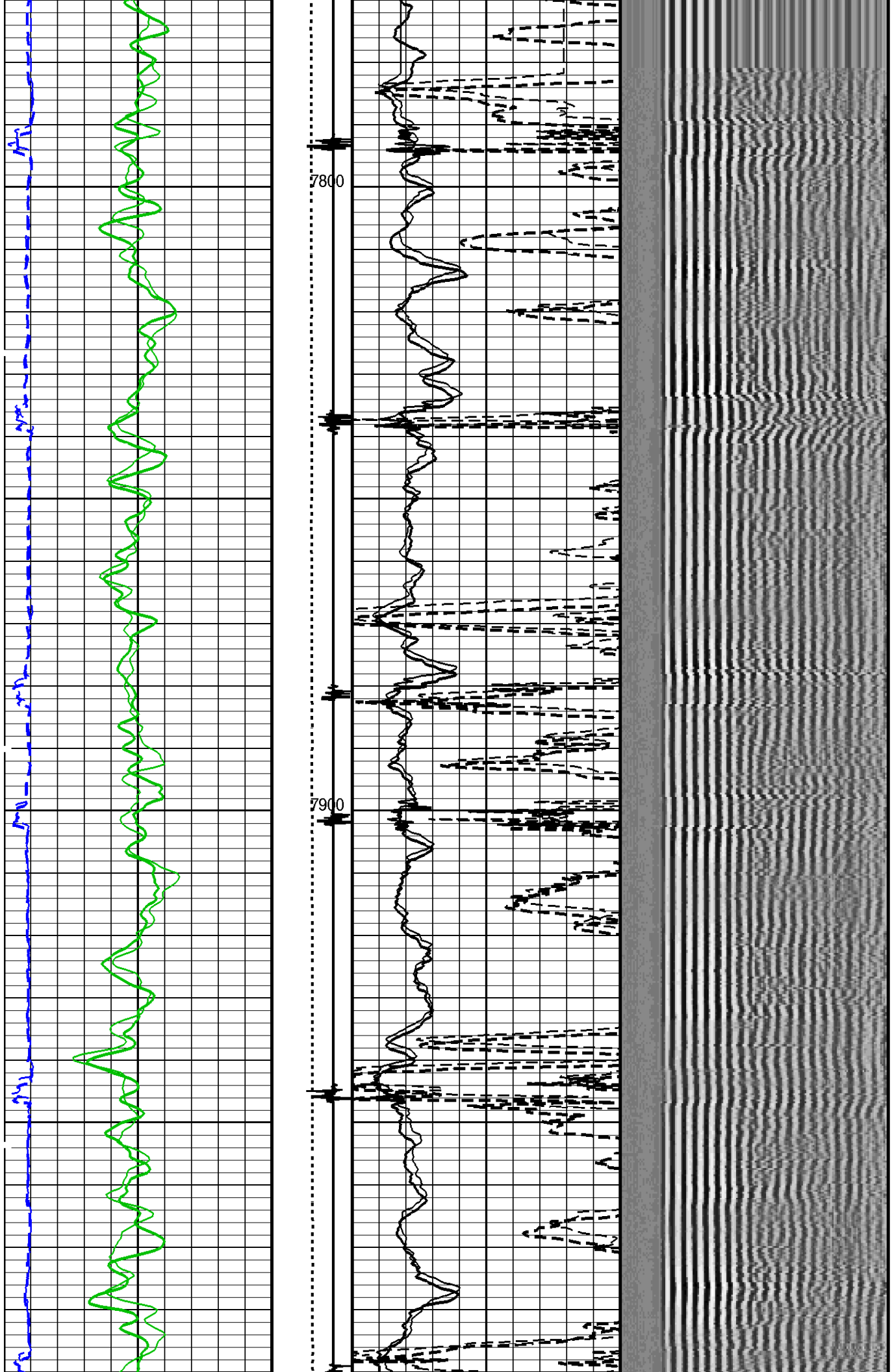
OP System Version: 19C0-187

SCMT-CB	SRPC-5214-H2-2012-OP19	PSPT	SRPC-5214-H2-2012-OP19

PIP SUMMARY

Time Mark Every 60 S

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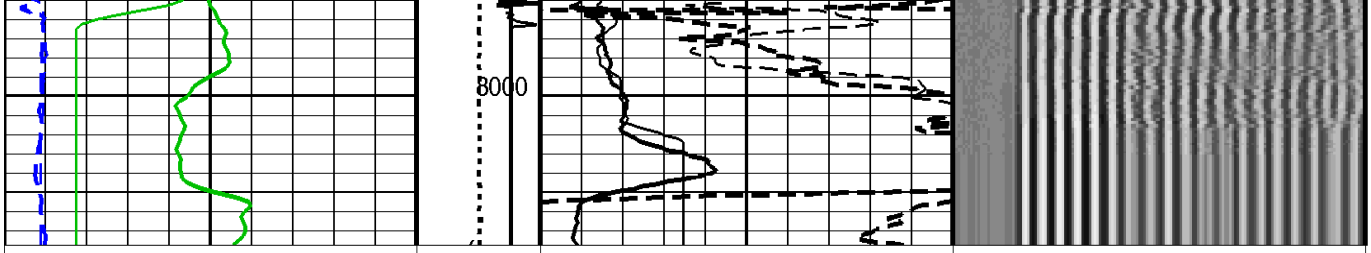
7900



GR_REP Curve (GR_REP)	CCLD_REP Curve (CCLD_REP)	CBL_REP Curve (CBL_REP)	Min Amplitude Max
0 (GAPI) 150	3 (V) -1	0 (MV) 100	VDL VariableDensity (VDL) 200 (US) 1200
TT_REP Curve (TT_REP)	TENS_REP Curve (TENS_REP) (LBF)	CBL_1_REP Curve (CBL_REP)	
260 (US) 160	0 2000	0 (MV) 10	

PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL_REP Vertical Scale: 5" per 100' Graphics File Created: 12-Jun-2013 18:30

OP System Version: 19C0-187

SCMT-CB	SRPC-5214-H2-2012-OP19	PSPT	SRPC-5214-H2-2012-OP19

<<<SCMT Cement Evaluation Information Summary>>>

Sonde Serial Number	SCMS-CB 8303		
Current Casing Size	4.50000 IN		
Casing Weight	11.6000 LB/F		
Expected CBL Amplitude in Free Pipe Section	80 MV	Minimum Sonic Amplitude	0.579149 MV (100% Cement)
			1.55185 MV (80% Cement)
		MAP Minimum Sonic Amplitude	4.32284 MV (100% Cement)
			8.10244 MV (80% Cement)
Master Calibration (Normalization)		Before Calibration (Adjustment)	
Date of Master Calibration	7-SEP-2012		
CBL Correction Factor	0.0756720	CBL Adjustment Factor (CBAF)	0.700000
MAP 1 Correction Factor	0.136845	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.165126		
MAP 3 Correction Factor	0.125717		
MAP 4 Correction Factor	0.196395		
MAP 5 Correction Factor	0.147692		
MAP 6 Correction Factor	0.128887		
MAP 7 Correction Factor	0.150775		
MAP 8 Correction Factor	0.144577		

Parameters

DLIS Name	Description	Value	
	SCMT-CB: Slim Cement Mapping Tool, 1-11/16 OD		
BILI	Bond Index Level for Zone Isolation	0.8	
CB3D	SCMT CBL 3 ft Peak Detection Mode	PEAK	
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	224.559	US
CB3T	SCMT CBL 3 ft Fixed Threshold Level	20	MV
CB5D	SCMT CBL 5 ft Peak Detection Mode	PEAK	
CB5G	SCMT CBL 5 ft Peak Detection T0_Delay and Noise Gate	338.559	US
CB5T	SCMT CBL 5 ft Fixed Threshold Level	20	MV
CBLG	CBL Gate Width	45	US

CBRA	CBL LQC Reference Amplitude in Free Pipe	80	MV
CMCF	CBL Cement Type Compensation Factor	1	
CMTC	SCMT Slow Channel Multiplexer Mode	SCAN	
CMTM	SCMT Operating Mode	LOG	
CSCS	SCMT Slow Channel Index	VCC	
CTHI	Casing Thickness	0.255617	IN
DTF	Delta-T Fluid	189	US/F
FATT	Acoustic Attenuation due to Fluid	0	DB/F
FCF	CBL Fluid Compensation Factor	0.924277	
GOBO	Good Bond	1.55185	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	167.559	US
MAPT	SCMT MAP Fixed Threshold Level	30	MV
MATT	Maximum Attenuation	16.5449	DB/F
MCCF	MAP Cement Type Compensation Factor	1	
MCI	Minimum Cemented Interval for Isolation	1.25	FT
MMSA	MAP Minimum Sonic Amplitude	4.32284	MV
MSA	Minimum Sonic Amplitude	0.579149	MV
PEDE	Peak Detection On/Off Switch in Playback	OFF	
VDLG	VDL Manual Gain	5	
ZCMT	Acoustic Impedance of Cement	6.8	MRAY
System and Miscellaneous			
CWEI	Casing Weight	11.60	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	1.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	12307	FT

Input DLIS Files

DEFAULT	SCMT_PSP_016LUP	FN:15	PRODUCER	12-Jun-2013 14:52	8014.5 FT	7768.0 FT
DEFAULT	SCMT_PSP_020PUP	FN:19	PRODUCER	12-Jun-2013 18:23	12323.0 FT	6.0 FT

Output DLIS Files

DEFAULT	SCMT_PSP_021PUP	FN:20	PRODUCER	12-Jun-2013 18:30

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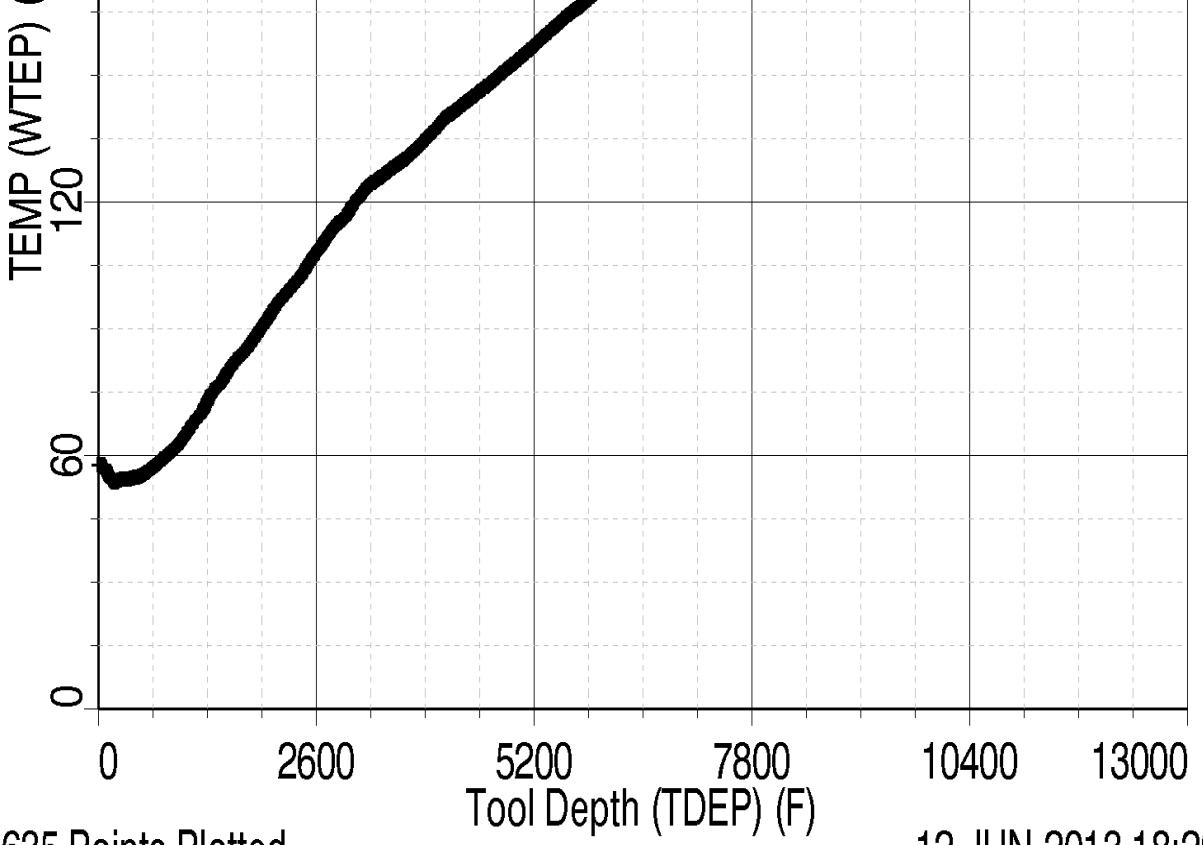
TEMPERATURE PLOT

MAXIS Field Log

Index: 12323.0 - 6.0 FT



24635 Points Plotted

12-JUN-2013 18:29

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PBMS COEFFICIENTS

MAXIS Field Log

Client:	ENCANA OIL & GAS (USA) INC	Tool:	PSP
Field:	STORY GULCH	Sub Type:	PBMS
Well:	SG 8512C-36 (D36 496)	Sensor:	GR
Run date:	12-Jun-2013		

PBMS Gamma Ray

Sonde Serial NB	RESISTORS FOR GR SENSOR N.33223,TOOL PBMS-BA0928. SENSOR S/N:
Sensor Serial NB	33223
Calib Date ddmmyy	090800
Matrix Size	12
Coeff CRC	CFE2

GR HV Rt

	Rt**0	Rt**1
Rt**0	+.182000000000e+04	+.332000000000e+04

Client:	ENCANA OIL & GAS (USA) INC	Tool:	PSP
Field:	STORY GULCH	Sub Type:	PBMS
Well:	SG 8512C-36 (D36 496)	Sensor:	WellTemp RTD
Run date:	12-Jun-2013		

PBMS RTD Well Thermometer

Sonde Serial NB	COEFFICIENTS FOR RTD THERMOMETER PBMS-B.928 S/N:
Sensor Serial NB	928
Calib Date ddmmyy	280612
Matrix Size	16
Coeff CRC	A24E

WTemp Coeff

	Tt**0	Tt**1	Tt**2
Tt**0	-.391987973189E+03	+.191346892512E+03	-.440920753451E+02

	Tt**3	Tt**4	Tt**5
Tt**0	+.957191300908E+01	-.711421725686E+00	0.0

Client:	ENCANA OIL & GAS (USA) INC	Tool:	PSP
Field:	STORY GULCH	Sub Type:	PBMS
Well:	SG 8512C-36 (D36 496)	Sensor:	CQG
Run date:	12-Jun-2013		

PBMS Quartz Gauge type F

Sonde Serial NB	COEFFICIENTS FOR CQG PBMS-B.928 S/N:
Sensor Serial NB	928

Calib Date ddmmyy 280612
Matrix Size 66
Coeff CRC 9DC3

Pres Coeff

	Fb**0	Fb**1	Fb**2
Fc**0	+.714463802232E+04	+.183434658655E-01	-.156620073569E-06
Fc**1	-.100638308957E+01	-.119899563644E-04	-.912155899025E-10
Fc**2	+.936268101283E-06	+.423898071451E-10	+.958076371919E-15
Fc**3	+.185123362373E-11	+.203107925433E-15	0.0
Fc**4	0.0	0.0	0.0
Fc**5	0.0	0.0	0.0

	Fb**3	Fb**4	Fb**5
Fc**0	-.746577997611E-10	-.588773826860E-15	-.622250441458E-19
Fc**1	-.120636521092E-15	+.400325894750E-19	0.0
Fc**2	0.0	0.0	0.0
Fc**3	0.0	0.0	0.0
Fc**4	0.0	0.0	0.0
Fc**5	0.0	0.0	0.0

PBMS Quartz Gauge type F
Sonde Serial NB :
Sensor Serial NB 928
Calib Date ddmmyy 280612
Matrix Size 66
Coeff CRC 283B

Temp Coeff

	Fc**0	Fc**1	Fc**2
Fb**0	+.117016867873E+03	-.284359629614E-03	+.604391180345E-08
Fb**1	-.598309140812E-02	+.182731130848E-07	+.160166486172E-12
Fb**2	-.307621454576E-07	+.300601550309E-12	+.311233548560E-17
Fb**3	-.419658736767E-12	+.117473708647E-16	0.0
Fb**4	0.0	0.0	0.0
Fb**5	0.0	0.0	0.0

	Fc**3	Fc**4	Fc**5
Fb**0	+.114322792679E-12	+.153807711176E-17	-.736714260866E-21
Fb**1	-.528037875456E-18	-.220337637519E-21	0.0
Fb**2	0.0	0.0	0.0
Fb**3	0.0	0.0	0.0

Fb**4	0.0	0.0	0.0
Fb**5	0.0	0.0	0.0

PBMS Quartz Gauge type F

Sonde Serial NB :

Sensor Serial NB 928

Calib Date ddmmyy 280612

Matrix Size 16

Coeff CRC 093F

Clock Freq Coeff

	(Fb'-Fc')**0	(Fb'-Fc')**1	(Fb'-Fc')**2
(Fb'-Fc')**0	+.310874009898E+05	+.288920923041E-02	+.697940727038E-06

	(Fb'-Fc')**3	(Fb'-Fc')**4	(Fb'-Fc')**5
(Fb'-Fc')**0	-.657432344763E-10	-.412920638782E-15	+.213369826099E-20

PBMS Quartz Gauge type F

Sonde Serial NB :

Sensor Serial NB 928

Calib Date ddmmyy 280612

Matrix Size 16

Coeff CRC 8419

Clock Temp Coeff

	(Fb'-Fc')**0	(Fb'-Fc')**1	(Fb'-Fc')**2
(Fb'-Fc')**0	+.115369519827E+03	-.565338877075E-02	-.333717531829E-07

	(Fb'-Fc')**3	(Fb'-Fc')**4	(Fb'-Fc')**5
(Fb'-Fc')**0	-.124387135327E-12	+.713102327208E-16	-.316084316842E-20

Slim Cement Mapping Tool, 1-11/16 OD / Equipment Identification

Primary Equipment:

Slim Cement Mapping Xmitter Electronics	SCMX - CA	
Slim Cement Mapping Sonde	SCMS - CB	8303
Slim Cement Mapping Cartridge	SCMC - CA	8120

Auxiliary Equipment:

Slim Electronics Cartridge Housing	SECH - CA

Slim Cement Mapping Tool, 1-11/16 OD Master Calibration

SCMT CBL and MAP Amplitude Normalization in SFT-155/-255

Phase	MAP 1 Amplitude Plus MV	Value
Master		876.9
500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)

Phase	MAP 2 Amplitude Plus MV	Value
Master		726.7
500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)

Phase	MAP 3 Amplitude Plus MV	Value
Master		954.5
500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)

Phase	MAP 4 Amplitude Plus MV	Value
Master		611.0
500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)

Phase	MAP 5 Amplitude Plus MV	Value
Master		812.5
500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)

Phase	MAP 6 Amplitude Plus MV	Value
Master		931.0
500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)

Phase	MAP 7 Amplitude Plus MV	Value
Master		795.9
500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)

Phase	MAP 8 Amplitude Plus MV	Value
Master		830.0
500.0 (Minimum)	1075 (Nominal)	1650 (Maximum)

Phase	CBL Amplitude Plus MV	Value
Master		1269
1000 (Minimum)	1350 (Nominal)	1700 (Maximum)

Master: 7-Sep-2012 16:30

Company: **ENCANA OIL & GAS (USA) INC**

Schlumberger

Well: **SG 8512C-36 (D36 496)**
Field: **STORY GULCH**
County: **GARFIELD**
State: **COLORADO**

SLIM CEMENT MAPPING LOG
CBL-VDL
GR-CCL